AUTHOR INDEX

VOLUME 19 NUMBERS 1–8

A

Abumrad, Nada A., Susan B. Stearns, Helen M. Tepperman, and **Jay Tepperman.** Studies on serum lipids, insulin, and glucagon and on muscle triglyceride in rats adapted to high fat and high carbohydrate diets 423

Ahrens, E. H., Jr. See *Samuel, Crouse, and Ahrens* 82

———. See *Samuel, Lieberman, and Ahrens* 94

Albers, John J. See *Warnick and Albers* 65

Alexander, Roger. See *Fears et al.* 3

Amatruda, John M., Dean H. Lockwood, Simeon Margolis, and **Lutz A. Kiesow.** [^{14}C]Palmitate uptake in isolated rat liver mitochondria: effects of fasting, diabetes mellitus, and inhibitors of carnitine acyltransferase 688

Ando, Susumu. See *Seyfried, Ando, and Yu* 538

———. See *Ueno, Ando, and Yu* 863

Angelin, Bo, Ingemar Björkhem, and **Kurt Einarsson.** Individual serum bile acid concentrations in normo- and hyperlipoproteinemia as determined by mass fragmentography: relation to bile acid pool size 527

———, **Kurt Einarsson, Kjell Hellström,** and **Barbro Leijd.** Bile acid kinetics in relation to endogenous triglyceride metabolism in various types of hyperlipoproteinemia 1004

———, ———, ———, and ———. Effects of cholestryamine and chenodeoxycholic acid on the metabolism of endogenous triglyceride in hyperlipoproteinemia 1017

———. See *Gustafsson et al.* 972

Anthony, Luean E., Douglas L. Schmucker, Jill S. Mooney, and **Albert L. Jones.** A quantitative analysis of the fine structure and drug metabolism in livers of clofibrate-treated young adult and retired breeder rats 154

Araki, Eiji. See *Murata, Ariga, and Araki* 172

Arbogast, Loretta Y. See *Rothblat, Arbogast,* and *Ray* 348

Ariga, Toshio. See *Murata, Ariga, and Araki* 172

———. See *Murata et al.* 368

Aringer, Leif. 7-Hydroxylation of 3-oxygenated C_{27}-, C_{28}, and C_{29}-steroids in rat liver 18,000 *g* supernate 933

Arner, Peter, and **Jan Östman.** Relationship between the tissue level of cyclic AMP and the fat cell size of human adipose tissue 613

Ashes, J. R., S. K. Gulati, L. J. Cook, S. C. Mills, and **T. W. Scott.** Ruminal hydrogenation of cholesterol 244

Askew, E. W., A. L. Hecker, V. G. Coppes, and **F. B. Stifel.** Cyclic AMP metabolism in adipose tissue of exercise-trained rats 729

Atasoy, Renan. See *Gallo et al.* 913

Avigan, Joel. See *Gamble et al.* 1068

B

Baggaley, Keith H. See *Fears et al.* 3

Baker, Nome, David B. Learn, and **K. R. Bruckdorfer.** Re-evaluation of lipogenesis from dietary glucose carbon in liver and carcass in mice 879

Barranger, J. A. See *Pentchev and Barranger* 401

Barth, Christian A. See *Weis and Barth* 856

Batta, A. K. See *Dayal et al.* 191

———. See *Tint et al.* 956

Baumann, N. See *Pollet et al.* 916

Beitz, Donald C. See *Linder and Beitz* 836

Belfrage, Per. See *Nilsson and Belfrage* 737

———. See *Tornqvist et al.* 654

Béréziat, Gilbert, Jean Chambaz, Germain Trugnan, Dominique Pépin, and **Jacques Polonovski.** Turnover of phospholipid linoleic and arachidonic acids in human platelets from plasma lecithins 495

Berman, Mones, Marshall Hall, III, Robert I. Levy, Shlomo Eisenberg, David W. Bilheimer, Robert D. Phair, and **Robert H. Goebel.** Metabolism of apoB and apoC lipoproteins in man: kinetic studies in normal and in hyperlipoproteinemic subjects 38

———. See *Malmendier and Berman* 978

Bilheimer, David W. See *Berman et al.* 38

Björgell, Per. See *Tornqvist et al.* 654

Björkhem, Ingemar. On the quantitative importance of ω-oxidation of fatty acids 585

———, **Rolf Blomstrand,** and **Lennart Svensson.** Effect of different dietary triglycerides on 7α-hydroxylation of cholesterol and other mixed-function oxidations 357

———, **Anders Kallner,** and **Karl-Eric Karlmar.** Effects of ascorbic acid deficiency on adrenal mitochondrial hydroxylations in guinea pigs 695

———. See *Angelin, Björkhem, and Einarsson* 527

Björntorp, Per, Majvor Karlsson, Håkan Pertoft, Per Pettersson, Lars Sjöström, and **Ulf Smith.** Isolation and characterization of cells from rat adipose tissue developing into adipocytes 316

Bloch, Craig A., and **John B. Watkins.** Determination of conjugated bile acids in human bile and duodenal fluid by reverse-phase high-performance liquid chromatography 510

Blomstrand, Rolf. See *Björkhem, Blomstrand, and Svensson* 357

Bow, Susan. See *Jamdar et al.* 763

Bowyer, D. E., J. S. Cridland, and **J. P. King.** A novel, semiautomated method for the estimation of free fatty acid in serum or plasma 274

Boyett, R. Lance. See *Heider and Boyett* 514

Bradley, Roy M. See *Fishman et al.* 77, 302

Bradlow, H. Leon. See *Rosenfeld et al.* 850

Brockman, Howard L. See *Momsen and Brockman* 1032

———. See *Smaby and Brockman* 323

Brown, Michael S. See *Fishman et al.* 302

Brown, W. Virgil. See *Le et al.* 578

Bruckdorfer, K. R. See *Baker, Learn, and Bruckdorfer* 879

C

Carey, Martin C. Critical tables for calculating the cholesterol saturation of native bile. A simple method

AUTHOR INDEX

VOLUME 19 NUMBERS 1–8

A

Abumrad, Nada A., Susan B. Stearns, Helen M. Tepperman, and **Jay Tepperman.** Studies on serum lipids, insulin, and glucagon and on muscle triglyceride in rats adapted to high fat and high carbohydrate diets 423

Ahrens, E. H., Jr. See *Samuel, Crouse, and Ahrens* 82

———. See *Samuel, Lieberman, and Ahrens* 94

Albers, John J. See *Warnick and Albers* 65

Alexander, Roger. See *Fears et al.* 3

Amatruda, John M., Dean H. Lockwood, Simeon Margolis, and **Lutz A. Kiesow.** [^{14}C]Palmitate uptake in isolated rat liver mitochondria: effects of fasting, diabetes mellitus, and inhibitors of carnitine acyltransferase 688

Ando, Susumu. See *Seyfried, Ando, and Yu* 538

———. See *Ueno, Ando, and Yu* 863

Angelin, Bo, Ingemar Björkhem, and **Kurt Einarsson.** Individual serum bile acid concentrations in normo- and hyperlipoproteinemia as determined by mass fragmentography: relation to bile acid pool size 527

———, **Kurt Einarsson, Kjell Hellström,** and **Barbro Leijd.** Bile acid kinetics in relation to endogenous triglyceride metabolism in various types of hyperlipoproteinemia 1004

———, ———, ———, and ———. Effects of cholestryamine and chenodeoxycholic acid on the metabolism of endogenous triglyceride in hyperlipoproteinemia 1017

———. See *Gustafsson et al.* 972

Anthony, Luean E., Douglas L. Schmucker, Jill S. Mooney, and **Albert L. Jones.** A quantitative analysis of the fine structure and drug metabolism in livers of clofibrate-treated young adult and retired breeder rats 154

Araki, Eiji. See *Murata, Ariga, and Araki* 172

Arbogast, Loretta Y. See *Rothblat, Arbogast,* and *Ray* 348

Ariga, Toshio. See *Murata, Ariga, and Araki* 172

———. See *Murata et al.* 368

Aringer, Leif. 7-Hydroxylation of 3-oxygenated C_{27}-, C_{28}, and C_{29}-steroids in rat liver 18,000 *g* supernate 933

Arner, Peter, and **Jan Östman.** Relationship between the tissue level of cyclic AMP and the fat cell size of human adipose tissue 613

Ashes, J. R., S. K. Gulati, L. J. Cook, S. C. Mills, and **T. W. Scott.** Ruminal hydrogenation of cholesterol 244

Askew, E. W., A. L. Hecker, V. G. Coppes, and **F. B. Stifel.** Cyclic AMP metabolism in adipose tissue of exercise-trained rats 729

Atasoy, Renan. See *Gallo et al.* 913

Avigan, Joel. See *Gamble et al.* 1068

B

Baggaley, Keith H. See *Fears et al.* 3

Baker, Nome, David B. Learn, and **K. R. Bruckdorfer.** Re-evaluation of lipogenesis from dietary glucose carbon in liver and carcass in mice 879

Barranger, J. A. See *Pentchev and Barranger* 401

Barth, Christian A. See *Weis and Barth* 856

Batta, A. K. See *Dayal et al.* 191

———. See *Tint et al.* 956

Baumann, N. See *Pollet et al.* 916

Beitz, Donald C. See *Linder and Beitz* 836

Belfrage, Per. See *Nilsson and Belfrage* 737

———. See *Tornqvist et al.* 654

Béréziat, Gilbert, Jean Chambaz, Germain Trugnan, Dominique Pépin, and **Jacques Polonovski.** Turnover of phospholipid linoleic and arachidonic acids in human platelets from plasma lecithins 495

Berman, Mones, Marshall Hall, III, Robert I. Levy, Shlomo Eisenberg, David W. Bilheimer, Robert D. Phair, and **Robert H. Goebel.** Metabolism of apoB and apoC lipoproteins in man: kinetic studies in normal and in hyperlipoproteinemic subjects 38

———. See *Malmendier and Berman* 978

Bilheimer, David W. See *Berman et al.* 38

Björgell, Per. See *Tornqvist et al.* 654

Björkhem, Ingemar. On the quantitative importance of ω-oxidation of fatty acids 585

———, **Rolf Blomstrand,** and **Lennart Svensson.** Effect of different dietary triglycerides on 7α-hydroxylation of cholesterol and other mixed-function oxidations 357

———, **Anders Kallner,** and **Karl-Eric Karlmar.** Effects of ascorbic acid deficiency on adrenal mitochondrial hydroxylations in guinea pigs 695

———. See *Angelin, Björkhem, and Einarsson* 527

Björntorp, Per, Majvor Karlsson, Håkan Pertoft, Per Pettersson, Lars Sjöström, and **Ulf Smith.** Isolation and characterization of cells from rat adipose tissue developing into adipocytes 316

Bloch, Craig A., and **John B. Watkins.** Determination of conjugated bile acids in human bile and duodenal fluid by reverse-phase high-performance liquid chromatography 510

Blomstrand, Rolf. See *Björkhem, Blomstrand, and Svensson* 357

Bow, Susan. See *Jamdar et al.* 763

Bowyer, D. E., J. S. Cridland, and **J. P. King.** A novel, semiautomated method for the estimation of free fatty acid in serum or plasma 274

Boyett, R. Lance. See *Heider and Boyett* 514

Bradley, Roy M. See *Fishman et al.* 77, 302

Bradlow, H. Leon. See *Rosenfeld et al.* 850

Brockman, Howard L. See *Momsen and Brockman* 1032

———. See *Smaby and Brockman* 323

Brown, Michael S. See *Fishman et al.* 302

Brown, W. Virgil. See *Le et al.* 578

Bruckdorfer, K. R. See *Baker, Learn, and Bruckdorfer* 879

C

Carey, Martin C. Critical tables for calculating the cholesterol saturation of native bile. A simple method

for the rigorous derivation of "Lithogenic Index" or "Percent Cholesterol Saturation" embodying both relative and total lipid concentration 945

Carman, George M., and **William Dowhan.** A spectrophotometric method for the assay of cytidine 5′-diphospho-1,2-diacyl-*sn*-glycerol-dependent enzymes of phospholipid metabolism 519

Catapano, Alberico L., Richard L. Jackson, Ellen B. Gilliam, Antonio M. Gotto, Jr., and **Louis C. Smith.** Quantification of apoC-II and apoC-III of human very low density lipoproteins by analytical isoelectric focusing 1047

Chambaz, Jean. See *Béréziat et al.* 495

Chanderbhan, R. See *Vahouny et al.* 570

Cheng, F. W. See *Tint et al.* 956

Chenouda, Michel. See *Gardner and Chenouda* 985

Chi, Emil Y. See *Prueitt, Chi, and Lagunoff* 410

Chiu, Teh-Hsing. See *Gilbertson et al.* 757

Christian, S. T. See *Monti, Christian, and Shaw* 222

Clements, R. S. See *Walkley et al.* 333

Connor, William E. See *Lin et al.* 215

Cook, L. J. See *Ashes et al.* 244

———. See *Nestel et al.* 899

Cooper, Allen D., and **P. Y. S. Yu.** Rates of removal and degradation of chylomicron remnants by isolated perfused rat liver 635

Coppes, V. G. See *Askew et al.* 729

Cornwell, David G. See *Patil and Cornwell* 416

Costello, Catherine. See *Shoyama et al.* 250

Cridland, J. S. See *Bowyer, Cridland, and King* 274

Crouse, John R., and **Scott M. Grundy.** Evaluation of a continuous isotope feeding method for measurement of cholesterol absorption in man 967

———. See *Samuel, Crouse, and Ahrens* 82

Cushman, Samuel W., and **Lester B. Salans.** Determination of adipose cell size and number in suspensions of isolated rat and human adipose cells 269

D

Dayal, B., A. K. Batta, S. Shefer, G. S. Tint, G. Salen, and **E. H. Mosbach.** Preparation of 24(*R*)- and 24(*S*)-5β-cholestane-3α,7α,24-triols and 25(*R*)- and 25(*S*)-5β-cholestane-3α,7α,26-triols by a hydroboration procedure 191

———, **G. Salen, G. S. Tint, V. Toome, S. Shefer,** and **E. H. Mosbach.** Absolute configuration of pentahydroxy bile alcohols excreted by patients with cerebrotendinous xanthomatosis: a circular dichroism study 187

———. See *Tint et al.* 956

Dietschy, John M. See *Turley and Dietschy* 924

Dobrow, R. See *Franson et al.* 18

Dowhan, William. See *Carman and Dowhan* 519

E

Eatough, Delbert J. See *Rehfeld, Eatough, and Plachy* 841

Eichberg, Joseph, and **George Hauser.** A rapid biosynthetic method for the preparation of radioactive phosphatidyl-CMP(CDP-diacylglycerol) of high specific activity 778

Einarsson, Kurt. See *Angelin, Björkhem, and Einarsson* 527

———. See *Angelin et al.* 1004, 1017

———. See *Gustafsson et al.* 972

Eisenberg, Shlomo. Effect of temperature and plasma on the exchange of apolipoproteins and phospholipids between rat plasma very low and high density lipoproteins 229

———. See *Berman et al.* 38

———. See *Schaefer, Eisenberg, and Levy* 667

Elliott, William H. See *Shaw and Elliott* 783

Elsbach, P. See *Franson et al.* 18

Englard, Sasha, Leonard J. Horwitz, and **Joan Tugendhaft Mills.** A simplified method for the measurement of γ-butyrobetaine hydroxylase activity 1057

Eriksson, H., W. Taylor, and **J. Sjövall.** Occurrence of sulfated 5α-cholanoates in rat bile 177

Ermidou, S. See *Pollet et al.* 916

F

Fainaru, Menahem. See *Imaizumi, Fainaru, and Havel* 712

———. See *Imaizumi et al.* 1038

Fallon, Harold J. See *Jamdar et al.* 763

Faust, Jerry R. See *Fishman et al.* 302

Fears, Robin, Keith H. Baggaley, Roger Alexander, Brian Morgan, and **Richard M. Hindley.** The participation of ethyl 4-benzyloxybenzoate (BRL 10894) and other aryl-substituted acids in glycerolipid metabolism 3

Fidge, Noel H., and **Parissa Poulis.** Metabolic heterogeneity in the formation of low density lipoprotein from very low density lipoprotein in the rat: evidence for the independent production of a low density lipoprotein subfraction 340

Fielding, C. J., J. P. Renston, and **P. E. Fielding.** Metabolism of cholesterol-enriched chylomicrons. Catabolism of triglyceride by lipoprotein lipase of perfused heart and adipose tissues 705

Fielding, P. E. See *Fielding, Renston, and Fielding* 705

Finkelstein, Jacob N. See *Mavis, Finkelstein, and Hall* 467

Finkelstein, Morris, and **Gerald Weissmann.** The introduction of enzymes into cells by means of liposomes (A Review) 287

Fisher, Nicholas S. See *Schwarzenbach and Fisher* 12

Fisher, Waldo R. See *Triplett and Fisher* 478

Fishman, Peter H., Roy M. Bradley, Michael S. Brown, Jerry R. Faust, and **Joseph L. Goldstein.** Similar content of phospholipids and gangliosides in normal and homozygous familial hypercholesterolemia fibroblasts 302

———, ———, **Joel Moss,** and **Vincent C. Manganiello.** Effect of serum on ganglioside uptake and choleragen responsiveness of transformed mouse fibroblasts 77

Fless, Gunther. See *Karlin et al.* 197

Fontaine, A. See *Lepage, Fontaine, and Roy* 505

Franson, R., R. Dobrow, J. Weiss, P. Elsbach, and **W. B. Weglicki.** Isolation and characterization of a phospholipase A_2 from an inflammatory exudate 18

Friedberg, Samuel J., and **Michael Halpert.** Ehrlich ascites tumor cell surface membranes: an abnormality in ether lipid content 57

Frier, Brian M. See *Saudek, Frier, and Liu* 827

Frolik, Charles A., Thomas E. Tavela, and **Michael B. Sporn.** Separation of the natural retinoids by high-pressure liquid chromatography 32

G

Gallo, Linda L., Renan Atasoy, George V. Vahouny, and **C. R. Treadwell.** Enzymatic assay for cholesterol ester hydrolase activity 913

———. See *Naghshineh et al.* 561

Gamble, Wilbert, Martha Vaughan, Howard S. Kruth, and **Joel Avigan.** Procedure for determination of free and total cholesterol in micro- or nanogram amounts suitable for studies with cultured cells 1068

Gardner, Bernard, and **Michel Chenouda.** Studies of bile acid secretion by isolated rat hepatocytes 985

Gaylor, James L. See *Yamaga and Gaylor* 373

Gelman, R. A. See *Gilbertson et al.* 757

Ghazarian, Jacob G., Pei-Yung Hsu, Albert W. Girotti, and **Jeffrey L. Winkelhake.** Purification of calciferol-binding proteins from kidney: physicochemical and immunological properties 601

Gilbertson, J. R., R. A. Gelman, Teh-Hsing Chiu, L. I. Gilbertson, and **T. E. Knauer.** Effects of small amounts of pentedecan-2-one on the growth of *Clostridium butyricum* 757

Gilbertson, L. I. See *Gilbertson et al.* 757

Gilliam, Ellen B. See *Catapano et al.* 1047

Ginsberg, Henry N. See *Le et al.* 578

Girotti, Albert W. See *Ghazarian et al.* 601

Glickman, R. M., A. Kilgore, and **J. Khorana.** Chylomicron apoprotein localization within rat intestinal epithelium: studies of normal and impaired lipid absorption 260

Goebel, Robert H. See *Berman et al.* 38

Goldfarb, Stanley. Rapid increase in hepatic HMG CoA reductase activity and in vivo cholesterol synthesis after Triton WR 1339 injection 489

Goldstein, Joseph L. See *Fishman et al.* 302

Goodwin, Charles D., and **Simeon Margolis.** Cyclic AMP-sensitive activation of hepatic sterol synthesis and 3-hydroxy-3-methylglutaryl coenzyme A reductase 747

Gotto, Antonio M., Jr. See *Catapano et al.* 1047

———. See *Shepherd et al.* 381, 656

Grundy, Scott M. See *Crouse and Grundy* 967

Gulati, S. K. See *Ashes et al.* 244

Gustafsson, Bengt E., Bo Angelin, Kurt Einarsson, and **Jan-Åke Gustafsson.** Influence of cholestyramine on synthesis of cholesterol and bile acids in germfree rats 972

Gustafsson, Jan. Effect of biliary obstruction on 26-hydroxylation of C_{27}-steroids in bile acid biosynthesis 237

———. See *Gustafsson et al.* 972

H

Hachey, David L. See *Szczepanik, Hachey, and Klein* 280

Hall, Bruce P. See *Mavis, Finkelstein, and Hall* 467

Hall, Marshall, III. See *Berman et al.* 38

Halpert, Michael. See *Friedberg and Halpert* 57

Hansbury, Elizabeth, and **Terence J. Scallen.** Resolution of desmosterol, cholesterol, and other sterol intermediates by reverse-phase high-pressure liquid chromatography 742

Hartman, Arthur D. See *Krause and Hartman* 774

Hashimoto, Hirosuke. See *Makino et al.* 443

Hauser, George. See *Eichberg and Hauser* 778

Havel, Richard J. See *Imaizumi, Fainaru, and Havel* 712

———. See *Imaizumi et al.* 1038

———. See *Sigurdsson, Noel, and Havel* 628

Hecker, A. L. See *Askew et al.* 729

Heider, John G., and **R. Lance Boyett.** The picomole determination of free and total cholesterol in cells in culture 514

Heizer, Robert F. See *Lin et al.* 215

Hellström, Kjell. See *Angelin et al.* 1004, 1017

Hindley, Richard M. See *Fears et al.* 3

Hinds, R. See *Vahouny et al.* 570

Hodges, V. A. See *Vahouny et al.* 570

Hood, R. L. See *Nestel et al.* 899

Horwitz, Leonard J. See *Englard, Horwitz, and Mills* 1057

Hostetler, Karl Y., Bruce D. Zenner, and **Harold P. Morris.** Altered subcellular and submitochondrial localization of CTP: phosphatidate cytidylyltransferase in the Morris 7777 hepatoma 553

———. See *Poorthuis and Hostetler* 307

Hsu, P-Y. See *Ghazarian et al.* 601

Hulan, H. W. See *Kramer and Hulan* 103

Hunt, C. E. See *Walkley et al.* 333

I

Imaizumi, Katsumi, Menahem Fainaru, and **Richard J. Havel.** Composition of proteins of mesenteric lymph chylomicrons in the rat and alterations produced upon exposure of chylomicrons to blood serum and serum lipoproteins 712

———, **Richard J. Havel, Menahem Fainaru,** and **Jean-Louis Vigne.** Origin and transport of the A-I and arginine-rich apolipoproteins in mesenteric lymph of rats 1038

J

Jackson, Richard L. See *Catapano et al.* 1047

Jacob, Jürgen. Hydrocarbons and multibranched ester waxes from the uropygial gland secretion of grebes (*Podicipediformes*) 148

Jakoi, Laszlo. See *Long et al.* 872

Jamdar, Subhash C., Martha Moon, Susan Bow, and **Harold J. Fallon.** Hepatic lipid metabolism. Age-related changes in triglyceride metabolism 763

Jones, Albert L. See *Anthony et al.* 154

Juhn, Dawn J. See *Karlin et al.* 197

K

Kadowaki, Masumi. See *Uchida et al.* 544

Kallner, Anders. See *Björkhem, Kallner, and Karlmar* 695

Kam, Wing, Kozhikot Kumaran, and **Bernard R. Landau.** Contribution of ω-oxidation to fatty acid oxidation by liver of rat and monkey 591

Karlaganis, Georg, and **Gustav Paumgartner.** Analysis of bile acids in serum and bile by capillary gas–liquid chromatography 771

Karlin, Joan B., Dawn J. Juhn, Gunther Fless, Angelo M. Scanu, and **Arthur H. Rubenstein.** Measurement of rhesus monkey (*Macaca mulatta*) apolipoprotein B in serum by radioimmunoassay: comparison of immuno-

reactivities of rhesus and human low density lipoproteins 197
Karlmar, Karl-Eric. See *Björkhem, Kallner, and Karlmar* 695
Karlsson, Majvor. See *Björntorp et al.* 316
Kartha, V. N. R., and **S. Krishnamurthy.** Effect of hypervitaminosis A on hemolysis and lipid peroxidation in the rat 330
Khorana, J. See *Glickman, Kilgore, and Khorana* 260
Kiesow, Lutz A. See *Amatruda et al.* 688
Kilgore, A. See *Glickman, Kilgore, and Khorana* 260
Killenberg, Paul G. Measurement and subcellular distribution of cholyl-CoA synthetase and bile acid-CoA:amino acid *N*-acyltransferase activities in rat liver 24
King, J. P. See *Bowyer, Cridland, and King* 274
Kishimoto, Yasuo. See *Shoyama et al.* 250
Klein, Peter D. See *Szczepanik, Hachey, and Klein* 280
Knauer, T. E. See *Gilbertson et al.* 757
Krabisch, Lennart. See *Tornqvist et al.* 654
Kramer, J. K. G., and **H. W. Hulan.** A comparison of procedures to determine free fatty acids in rat heart 103
Krause, Brian R., and **Arthur D. Hartman.** Quantification of adipocyte free and esterified cholesterol using liquid gel chromatography 774
Krishnamurthy, S. See *Kartha and Krishnamurthy* 330
Kruth, Howard S. See *Gamble et al.* 1068
Kumaran, Kozhikot. See *Kam, Kumaran, and Landau* 591
Kundu, Samar K., and **Swapan K. Roy.** A rapid and quantitative method for the isolation of gangliosides and neutral glycosphingolipids by DEAE–silica gel chromatography 388

L

Lagunoff, David. See *Prueitt, Chi, and Lagunoff* 410
Landau, Bernard R. See *Kam, Kumaran, and Landau* 591
Le, Ngoc-Anh, John S. Melish, Brian C. Roach, Henry N. Ginsberg, and **W. Virgil Brown.** Direct measurement of apoprotein B specific activity in ^{125}I-labeled lipoproteins 578
Learn, David B. See *Baker, Learn, and Bruckdorfer* 879
Leijd, Barbro. See *Angelin et al.* 1004, 1017
Lepage, G., A. Fontaine, and **C. C. Roy.** Vulnerability of keto bile acids to alkaline hydrolysis 505
Le Saux, F. See *Pollet et al.* 916
Levin, J. See *Rosenfeld et al.* 850
Levy, Robert I. See *Berman et al.* 38
———. See *Schaefer, Eisenberg, and Levy* 667
Lieberman, Sidney. See *Samuel, Lieberman, and Ahrens* 94
Lin, Don S., William E. Connor, L. Kyle Napton, and **Robert F. Heizer.** The steroids of 2000-year-old coprolites 215
Linder, James R., and **Donald C. Beitz.** Sterol synthesis and CO_2 production from mevalonate in calves 836
Lindsey, J. R. See *Walkley et al.* 333
Liu, George C. K. See *Saudek, Frier, and Liu* 827
Lockwood, Dean H. See *Amatruda et al.* 688
Long, Thomas T., III, Laszlo Jakoi, Robert Stevens, and **Steven Quarfordt.** The sources of rat biliary cholesterol and bile acid 872

M

Makino, Isao, and **Shoichi Nakagawa.** Changes of biliary lipid and biliary bile acid composition in patients after administration of ursodeoxycholic acid 723
———, **Akiko Tashiro, Hirosuke Hashimoto, Shoichi Nakagawa,** and **Itsuo Yoshizawa.** Radioimmunoassay of ursodeoxycholic acid in serum 443
Malmendier, Claude, and **Mones Berman.** Endogenously labeled low density lipoprotein triglyceride and apoprotein B kinetics 978
Manganiello, Vincent C. See *Fishman et al.* 77
Marcus, Aaron J. The role of lipids in platelet function with particular reference to the arachidonic acid pathway 793
Margolis, Simeon. See *Amatruda et al.* 688
———. See *Goodwin and Margolis* 747
———. See *Shakir, Sundaram, and Margolis* 433
Marsh, Julian B. Labeling of high density lipoproteins with [^{3}H]acetic anhydride 107
Masushige, Soichi, Jonathan B. Schreiber, and **George Wolf.** Identification and characterization of mannosyl retinyl phosphate occurring in rat liver and intestine in vivo 619
Mathur, Satya N., and **Arthur A. Spector.** Effects of dietary fat composition on the Ehrlich ascites tumor fluid lipoproteins 457
Mavis, Richard D., Jacob N. Finkelstein, and **Bruce P. Hall.** Pulmonary surfactant synthesis. A highly active microsomal phosphatidate phosphohydrolase in the lung 467
McCluer, Robert H. See *Ullman and McCluer* 910
McKibbin, John M. Fucolipids (Review) 131
Meisner, Herman, and **Sadie Taylor.** Antilipolytic effects of chlorophenoxyisobutyrate and warfarin in adipocytes 1025
Melish, John S. See *Le et al.* 578
Miller, N. E., D. B. Weinstein, and **D. Steinberg.** Uptake and degradation of high density lipoprotein: comparison of fibroblasts from normal subjects and from homozygous familial hypercholesterolemic subjects 644
Mills, Joan Tugendhaft. See *Englard, Horwitz, and Mills* 1057
Mills, S. C. See *Ashes et al.* 244
———. See *Nestel et al.* 899
Miyatake, Tadashi. See *Murata et al.* 368
Momsen, William E., and **Howard L. Brockman.** Purification of pancreatic lipase via its affinity for bile salts and apolar surfaces 1032
Monge, M. See *Pollet et al.* 916
Monti, J. A., S. T. Christian, and **W. A. Shaw.** Synthesis and properties of a highly fluorescent derivative of phosphatidylethanolamine 222
Moon, Martha. See *Jamdar et al.* 763
Mooney, Jill S. See *Anthony et al.* 154
Morgan, Brian. See *Fears et al.* 3
Morris, Harold P. See *Hostetler, Zenner, and Morris* 553
Mosbach, E. H. See *Dayal et al.* 187, 191
———. See *Tint et al.* 956
Moss, Joel. See *Fishman et al.* 77
Murata, Takeshi. Analysis of fatty acid methyl esters by a

gas–liquid chromatography–chemical ionization mass spectrometry computer system 166
———, **Toshio Ariga,** and **Eiji Araki.** Determination of double bond positions of unsaturated fatty acids by a chemical ionization mass spectrometry–computer system 172
———, ———, **Mieko Oshima,** and **Tadashi Miyatake.** Characterization of trimethylsilyl derivatives of cerebrosides by direct inlet–chemical ionization mass spectrometry 368

N

Nagshineh, S., C. R. Treadwell, L. L. Gallo, and **G. V. Vahouny.** Protein kinase-mediated phosphorylation of a purified sterol hydrolase from bovine adrenal cortex 561
Nakagawa, Shoichi. See *Makino and Nakagawa* 723
———. See *Makino et al.* 443
Napton, L. Kyle. See *Lin et al.* 215
Nestel, P. J., A. Poyser, R. L. Hood, S. C. Mills, M. R. Willis, L. J. Cook, and **T. W. Scott.** The effect of dietary fat supplements on cholesterol metabolism in ruminants 899
Nilsson, Nils Östen, and **Per Belfrage.** Effects of acetate, acetaldehyde, and ethanol on lipolysis in isolated rat adipocytes 737
Noel, Simon-Pierre. See *Sigurdsson, Noel, and Havel* 628
Nomura, Yasuharu. See *Uchida et al.* 544

O

Ohishi, Nobuko. See *Ohkawa, Ohishi, and Yagi* 1053
Ohkawa, Hiroshi, Nobuko Ohishi, and **Kunio Yagi.** Reaction of linoleic acid hydroperoxide with thiobarbituric acid 1053
Okabe, Hikaru. See *Shoyama et al.* 250
Oshima, Mieko. See *Murata et al.* 368
Östman, Jan. See *Arner and Östman* 613
Ostwald, R. See *Traber and Ostwald* 448

P

Packard, Christopher J. See *Shepherd et al.* 381, 656
Patil, Gajanan S., and **David G. Cornwell.** Interfacial oxidation of α-tocopherol and the surface properties of its oxidation products 416
Patsch, Josef R. See *Shepherd et al.* 381
Paumgartner, Gustav. See *Karlaganis and Paumgartner* 771
Pentchev, P. G., and **J. A. Barranger.** Sphingolipidoses: molecular manifestations and biochemical strategies 401
Pépin, Dominique. See *Béréziat et al.* 495
Pertoft, Håkan. See *Björntorp et al.* 316
Pettersson, Per. See *Björntorp et al.* 316
Phair, Robert D. See *Berman et al.* 38
Pitts, L. L., II. See *Rudel and Pitts* 992
Plachy, William Z. See *Rehfeld, Eatough, and Plachy* 841
Pollet, S., S. Ermidou, F. Le Saux, M. Monge, and **N. Baumann.** Microanalysis of brain lipids: multiple two-dimensional thin-layer chromatography 916
Polonovski, Jacques. See *Béréziat et al.* 495
Poorthuis, Bernadus J. H. M., and **Karl Y. Hostetler.** Conversion of diphosphatidylglycerol to bis(monoacylglyceryl)phosphate by lysosomes 307
Poulis, Parissa. See *Fidge and Poulis* 340
Poyser, A. See *Nestel et al.* 899
Prueitt, John L., Emil Y. Chi, and **David Lagunoff.** Pulmonary surface-active materials in the Chediak–Higashi syndrome 410

Q

Quarfordt, Steven. See *Long et al.* 872

R

Radin, Norman S. The preparative isolation of lecithin 922
Ray, Eva K. See *Rothblat, Arbogast, and Ray* 348
Rehfeld, Selwyn J., Delbert J. Eatough, and **William Z. Plachy.** The binding isotherms for the interaction of 5-doxyl stearic acid with bovine and human albumin 841
Renston, J. P. See *Fielding, Renston, and Fielding* 705
Roach, Brian C. See *Le et al.* 578
Rosenfeld, R. S., H. Leon Bradlow, J. Levin, and **Barnett Zumoff.** Preparation of [24,25-^{3}H]cholesterol. Oxidation in man as a measure of bile acid formation 850
Rothblat, G. H., Loretta Y. Arbogast, and **Eva K. Ray.** Stimulation of esterified cholesterol accumulation in tissue culture cells exposed to high density lipoproteins enriched in free cholesterol 348
Roy, C. C. See *Lepage, Fontaine, and Roy* 505
Roy, Swapan K. See *Kundu and Roy* 388
Rubenstein, Arthur H. See *Karlin et al.* 197
Rudel, L. L., and **L. L. Pitts, II.** Male–female variability in the dietary cholesterol-induced hyperlipoproteinemia of cynomolgus monkeys 992

S

Salans, Lester B. See *Cushman and Salans* 269
Salen, G. See *Dayal et al.* 187, 191
———. See *Tint et al.* 956
Sallee, Verney L. Determinants of fatty acid and alcohol monomer activities in mixed micellar solutions 207
Samuel, Paul, John R. Crouse, and **E. H. Ahrens, Jr.** Evaluation of an isotope ratio method for measurement of cholesterol absorption in man 82
———, **Sidney Lieberman,** and **E. H. Ahrens, Jr.** Comparison of cholesterol turnover by sterol balance and input–output analysis, and a shortened way to estimate total exchangeable mass of cholesterol by the combination of the two methods 94
Saudek, Christopher D., Brian M. Frier, and **George C. K. Liu.** Plasma squalene: lipoprotein distribution and kinetic analysis 827
Scallen, Terence J. See *Hansbury and Scallen* 742
Scanu, Angelo M. See *Karlin et al.* 197
Schacht, Jochen. Purification of polyphosphoinositides by chromatography on immobilized neomycin 1063
Schaefer, Ernst J., Shlomo Eisenberg, and **Robert I. Levy.** Lipoprotein apoprotein metabolism 667
Schmid, Harald H. O. See *Schmid and Schmid* 894
Schmid, Patricia C., and **Harald H. O. Schmid.** Lipase

hydrolysis of mammalian long-chain 1,2-alkanediol diesters. Non-random distribution of fatty acids 894
Schmucker, Douglas L. See *Anthony et al.* 154
Schreiber, Jonathan B. See *Masushige, Schreiber, and Wolf* 619
Schwarzenbach, René P., and **Nicholas S. Fisher.** Rapid determination of the molecular weight distribution of total cellular fatty acids using chemical ionization mass spectrometry 12
Scott, T. W. See *Ashes et al.* 244
———. See *Nestel et al.* 899
Seyfried, Thomas N., Susumu Ando, and **Robert K. Yu.** Isolation and characterization of human liver hematoside 538
Shakir, K. M. Mohamed, Shanmuga G. Sundaram, and **Simeon Margolis.** Lipid synthesis in isolated intestinal cells 433
Shaw, Roger, and **William H. Elliott.** Bile acids. LV. 2,2-Dimethoxypropane: an esterifying agent preferred to diazomethane for chenodeoxycholic acid 783
Shaw, W. A. See *Monti, Christian, and Shaw* 222
Shefer, S. See *Dayal et al.* 187, 191
———. See *Tint et al.* 956
Shepherd, James, Christopher J. Packard, Antonio M. Gotto, Jr., and **O. David Taunton.** A comparison of two methods to investigate the metabolism of human apolipoproteins A-I and A-II 656
———, **Josef R. Patsch, Christopher J. Packard, Antonio M. Gotto, Jr.,** and **O. David Taunton.** Dynamic properties of human high density lipoprotein apoproteins 381
Shoyama, Yukihiro, Yikaru Okabe, Yasuo Kishimoto, and **Catherine Costello.** Total synthesis of stereospecific sphingosine and ceramide 250
Sigurdsson, Gunnar, Simon-Pierre Noel, and **Richard J. Havel.** Catabolism of the apoprotein of low density lipoproteins by the isolated perfused rat liver 628
Sjöström, Lars. See *Björntorp et al.* 316
Sjövall, J. See *Eriksson, Taylor, and Sjövall* 177
Smaby, Janice M., and **Howard L. Brockman.** Properties of cholesteryl oleate and triolein in mixed monolayers at the air–water interface 323
Smith, Louis C. See *Catapano et al.* 1047
Smith, Ulf. See *Björntorp et al.* 316
Spector, Arthur A. See *Mathur and Spector* 457
Sporn, Michael B. See *Frolik, Tavela, and Sporn* 32
Stearns, Susan B. See *Abumrad et al.* 423
Steinberg, D. See *Miller, Weinstein, and Steinberg* 644
Stevens, Robert. See *Long et al.* 872
Stifel, F. B. See *Askew et al.* 729
Sundaram, Shanmuga G. See *Shakir, Sundaram, and Margolis* 433
Svensson, Lennart. See *Björkhem, Blomstrand, and Svensson* 357
Szczepanik, Patricia A., David L. Hachey, and **Peter D. Klein.** Evaluation of Poly S-179 as a stationary phase for the gas–liquid chromatography–mass spectrometry of bile acid methyl ester acetates 280

T

Takase, Haruto. See *Uchida et al.* 544
Takano, Kyoji. See *Uchida et al.* 544
Takeuchi, Nozomu. See *Uchida et al.* 544
Tashiro, Akiko. See *Makino et al.* 443
Taunton, O. David. See *Shepherd et al.* 381, 656
Tavela, Thomas E. See *Frolik, Tavela and Sporn* 32
Taylor, Sadie. See *Meisner and Taylor* 1025
Taylor, W. See *Eriksson, Taylor, and Sjövall* 177
Tepperman, Helen M. See *Abumrad et al.* 423
Tepperman, Jay. See *Abumrad et al.* 423
Tint, G. S., B. Dayal, A. K. Batta, S. Shefer, F. W. Cheng, G. Salen, and **E. H. Mosbach.** Gas–liquid chromatography–mass spectrometry of trimethylsilyl ethers of bile alcohols 956
———. See *Dayal et al.* 187, 191
Toome, V. See *Dayal et al.* 187
Tornqvist, Hans, Per Björgell, Lennart Krabisch, and **Per Belfrage.** Monoacylmonoalkylglycerol as a substrate for diacylglycerol hydrolase activity in adipose tissue 654
Traber, Maret G., and **R. Ostwald.** Cholesterol absorption and steroid excretion in cholesterol-fed guinea pigs 448
Treadwell, C. R. See *Gallo et al.* 913
———. See *Naghshineh et al.* 561
———. See *Vahouny et al.* 570
Triplett, Richard B., and **Waldo R. Fisher.** Proteolytic digestion in the elucidation of the structure of low density lipoprotein 478
Trugnan, Germain. See *Béréziat et al.* 495
Tserng, Kou-Yi. A convenient synthesis of 3-keto bile acids by selective oxidation of bile acids with silver carbonate–celite 501
Turley, Stephen D., and **John M. Dietschy.** Re-evaluation of the 3α-hydroxysteroid dehydrogenase assay for total bile acids in bile 924

U

Uchida, Kiyohisa, Yasuharu Nomura, Masumi Kadowaki, Haruto Takase, Kyoji Takano, and **Nozomu Takeuchi.** Age-related changes in cholesterol and bile acid metabolism in rats 544
Ueno, K., S. Ando, and **R. K. Yu.** Gangliosides of human, cat, and rabbit spinal cords and cord myelin 863
Ullman, M. David, and **Robert H. McCluer.** Quantitative microanalysis of perbenzoylated neutral glycosphingolipids by high-performance liquid chromatography with detection at 230 nm 910

V

Vahouny, George V., R. Chanderbhan, R. Hinds, V. A. Hodges, and **C. R. Treadwell.** ACTH-induced hydrolysis of cholesteryl esters in rat adrenal cells 570
———. See *Gallo et al.* 913
———. See *Naghshineh et al.* 561
Vaughan, Martha. See *Gamble et al.* 1068
Vigne, Jean-Louis. See *Imaizumi et al.* 1038

W

Walkley, S. U., C. E. Hunt, R. S. Clements, and **J. R. Lindsey.** Description of obesity in the PBB/Ld mouse 333

Warnick, G. Russell, and **John J. Albers.** A comprehensive evaluation of the heparin–manganese precipitation procedure for estimating high density lipoprotein cholesterol 65
Watkins, John B. See *Bloch and Watkins* 510
Weglicki, W. B. See *Franson et al.* 18
Weinstein, D. B. See *Miller, Weinstein, and Steinberg* 644
Weis, Elmar E., and **Christian A. Barth.** The extracorporeal bile duct: a new model for determination of bile flow and bile composition in the intact rat 856
Weiss, J. See *Franson et al.* 18
Weissmann, Gerald. See *Finkelstein and Weissmann* 287
Willis, M. R. See *Nestel et al.* 899
Winkelhake, Jeffrey L. See *Ghazarian et al.* 601
Wolf, George. See *Masushige, Schreiber, and Wolf* 619

Y

Yagi, Kunio. See *Ohkawa, Ohishi, and Yagi* 1053
Yamaga, Nobuo, and **James L. Gaylor.** Characterization of the microsomal steroid-8-ene isomerase of cholesterol biosynthesis 373
Yoshizawa, Itsuo. See *Makino et al.* 443
Yu, P. Y. S. See *Cooper and Yu* 635
Yu, Robert K. See *Seyfried, Ando, and Yu* 538
———. See *Ueno, Ando, and Yu* 863

Z

Zenner, Bruce D. See *Hostetler, Zenner, and Morris* 553
Zumoff, Barnett. See *Rosenfeld et al.* 850

SUBJECT INDEX

VOLUME 19 NUMBERS 1–8

A

Absorption: Of cholesterol in man 967
[^{3}H]Acetic anhydride: Use of in labeling HDL 107
ACTH
Effect of on adrenal mitochondrial hydroxylations in guinea pigs 695
Induction of hydrolysis of cholesteryl esters in rat adrenal cells 570
Adenyl cyclase: In rat adipocyte ghosts 729
Adipocytes
Antilipolytic effects of CPIB and warfarin 1025
Cholesterol of, free and esterified, quantitation by liquid gel chromatography 774
Development in vitro in culture 316
Of exercise-trained rats, metabolism of cyclic AMP in 729
Isolated rat, effects of acetate, acetaldehyde, and ethanol on lipolysis in 737
In the PBB/1d mouse, cellularity and metabolism 335
Adipose tissue
Cell size and number in suspension of, rat and human 269
Diacylglycerol hydrolase activity in 654
Of exercise-trained rats, cyclic AMP metabolism in 729
Fat cells, relationship between size and level of cyclic AMP 613
Lipolysis, in rats adapted to high-fat and high-carbohydrate diets 423
Rat, isolation and characterization of preadipocytes 316
Adrenal cells: Rat, ACTH-induced hydrolysis of cholesteryl esters 570
Adrenal cortex: Bovine, phosphorylation of sterol ester hydrolase in 561
Adrenal gland: Mitochondrial hydroxylations, effect of ascorbic acid deficiency on, in guinea pigs 695
Age: Effect of on cholesterol and bile acid metabolism in the rat 544
Albumin: Binding isotherms for the interaction of 5-doxyl stearic acid 841
1,2-Alkanediol diesters: Nonrandom distribution of fatty acids in 894
Alk-1-enyl lipids: In surface membranes of Ehrlich ascites tumor cells 57
Antilipolytic effect: Of CPIB and warfarin in adipocytes 1025
Apolipoprotein(s)
A-I, and A-II, comparison of two methods to investigate metabolism of in humans 656
A-I, interactions with HDL_2 and HDL_3 383
A-I, origin and transport in rat mesenteric lymph 1038
A-II, interactions with HDL_2 and HDL_3 383
A-*IV*, in rat mesenteric lymph 1038
ARP, origin and transport in rat mesenteric lymph 1038
B, and A-I, antisera, in indirect immunofluorescent studies of lipid absorption 260
B, direct measurement of specific activity in ^{125}I-labeled lipoproteins 578
B, in human LDL, endogenously labeled, fractional catabolic rate 978
B, kinetic studies in normal and hyperlipoproteinemic subjects 38
B, measurement of in LDL of rhesus monkey by radioimmunoassay 197
B, in VLDL, turnover of 578
B, of VLDL and LDL, kinetics of in rats 342
C, exchange between rat plasma VLDL and HDL 229
C, kinetic studies in normal and hyperlipoproteinemic subjects 38
C, transfer between HDL subclasses 383
C-II and C-III in human VLDL, quantification by analytical isoelectrofocusing 1047
Composition of Ehrlich ascites tumor fluid lipoproteins 457
Composition of mesenteric lymph chylomicrons exposed to serum and serum proteins 712
Of LDL, catabolism of by the isolated perfused liver 628
Synthesis, in rat intestine 1038
Apoprotein(s)
Of human HDL, dynamic properties of 383
Of lipoproteins, metabolism of 667
Arachidonic acid
In platelet phospholipids, turnover of 495
Transformation of, in human platelets 793
Arginine-rich apoprotein: Origin and transport in rat mesenteric lymph 1038
ARP: *see* **Arginine-rich apoprotein**
Ascorbic acid: Deficiency, effect of on adrenal mitochondrial hydroxylations in guinea pigs 695

B

4-Benzyloxybenzoate (BRL 10894): Participation in glycerolipid metabolism 3
Bile
Cholesterol saturation of, critical tables 945
Composition of, determination in the rat with an extracorporeal bile duct 856
Rat, sources of cholesterol and bile acid in 872
Bile acid(s)
Age-related changes in metabolism of, in rats 544
Biliary, sources of in the rat 872
Composition, in male and female rats 177
Concentration in serum, as determined by mass fragmentography 527
Conjugate formation, in rat liver 24
Conjugated, in human bile and duodenal fluid, determination of by reverse-phase HPLC 510
Effect of ursodeoxycholic acid administration on composition of, in patients 723
Fecal excretion in germfree rats 972
Formation of CoA derivatives, in rat liver 24
Formation in man, measured by oxidation of [24,25-^{3}H]cholesterol 850
In 2000-year-old human coprolites 215

3-Keto, synthesis of from bile acids using silver carbonate-celite 501
Keto, vulnerability to alkaline hydrolysis 505
Methyl ester acetates, GLC–MS of, using Poly S-179 as stationary phase 280
Methyl ester trimethylsilyl ether derivatives of, GLC–MS 280
Methylation of using 2,2-dimethoxypropane 783
Oxidation of in synthesis of 3-keto bile acids 501
Pool size, relation to serum bile acid concentrations 527
Secretion by isolated rat hepatocytes 985
In serum and bile, capillary GLC of 771
Synthesis in germfree rats, influence of cholestyramine 972
Synthesis, 26-hydroxylation of C_{27}-steroids, effect of biliary obstruction 237
Total in bile, assay for using 3α-hydroxysteroid dehydrogenase 924
Bile acid-CoA: Amino acid *N*-acyltransferase in rat liver, measurement and subcellular distribution 24
Bile acid kinetics: Relation to endogenous triglyceride metabolism in various types of hyperlipoproteinemia 1004
Bile alcohols
Pentahydroxy, circular dichromism study of configuration 187
Trimethylsilyl ethers, GLC–MS 956
Bile duct, extracorporeal: A model for determination of bile flow and composition in the intact rat 856
Bile salts: And lecithin, ratios in bile 945
Micelles, activity of fatty acid and fatty alcohol monomers 207
Biliary obstruction: *Effect of on 26-hydroxylation of* C_{27}-steroids 237
Biliary secretion: *Rate, determination in the rat* 872
Biosynthesis: Of radioactive phosphatidyl-CMP (CDP-diacylglycerol) by rat pineal glands 778
Bis(monoacylglyceryl)phosphate: Formation from diphosphatidylglycerol by lysosomes 309
Blood coagulation: Role of platelets in 793
Brain lipids: Microanalysis of by multiple two-dimensional TLC 916
BRL 10894: *see* **4-Benzyloxybenzoate**
γ-Butyrobetaine hydroxylase: Activity, assay in rat liver and rabbit kidney 1057

C

Calciferol-binding proteins
Kidney, physicochemical and immunological properties 601
Kidney, purification of 601
Carnitine: Biosynthesis; assay of γ-butyrobetaine hydroxylase activity 1057
Carnitine acyltransferase: Inhibitors of, effect of on [^{14}C]palmitate uptake in isolated rat liver mitochondria 688
Casein, formaldehyde-treated: Use of in protecting cholesterol from ruminal hydrogenation 244
CDP-diacylglycerol: Radioactive, biosynthesis of 778
Cells, medial: Exposed to cholesterol-enriched HDL, esterified cholesterol accumulation 350
Central nervous system: Tissues, ganglioside contents of 863
Ceramide: Stereospecific, total synthesis of 250
Cerebrosides: Trimethylsilyl derivatives, characterization by direct inlet–chemical ionization mass spectrometry 370
Cerebrotendinous xanthomatosis: Configuration of pentahydroxy bile alcohols excreted by patients with 187
Chediak–Higashi syndrome: Pulmonary surface-active material in 410
Chenodeoxycholic acid
Effect on metabolism of endogenous triglyceride in hyperlipoproteinemia 1017
Esterification of using diazomethane, artifact formation 783
Esterification of using 2,2-dimethoxypropane 783
Kinetics, relation to endogenous triglyceride metabolism in various types of hyperlipoproteinemia 1004
Chlorophenoxyisobutyrate: Antilipolytic effect in adipocytes 1025
Cholic acid: Kinetics, relation to endogenous triglyceride metabolism in various types of hyperlipoproteinemia 1004
Choleragen: Responsiveness of transformed mouse fibroblasts, effect of serum 77
5β-cholestane triols
(*R*)- and (*S*)-forms prepared by hydroboration, characterization of 191
3α,7α,24-triols, 24(*R*)- and 24(*S*)-, preparation of by *hydroboration* 191
3α,7α,26-triols, 25(*R*)- and 25(*S*)-, preparation of by *hydroboration* 191
Cholesterol
Absorption in cholesterol-fed guinea pigs 448
Absorption in man, by a continuous isotope feeding *method* 967
Absorption in man, evaluation of an isotope ratio *method for measurement of* 82
Age-related changes in metabolism of, in rats 544
Of bile, critical tables for calculation of 945
Biliary, sources of in the rat 872
Determination of in cultured cells 514
Dietary, effect of on cholesterol absorption and steroid excretion in guinea pigs 448
Dietary, induction of hyperlipoproteinemia in cynomolgus monkeys 992
Esterified, accumulation in tissue culture cells exposed to cholesterol-enriched HDL 350
Flux, in rats with an extracorporeal bile duct 856
Free and esterified in adipocytes, quantitation by liquid gel chromatography 774
Free and total, determination in cultured cells 1068
In HDL, evaluation of heparin–manganese precipitation procedures for estimating 65
[^{14}C]-Labeled, use in measuring cholesterol absorption in man 967
[24,25-^{3}H]-Labeled, preparation of 850
Metabolism, in ruminants, effect of dietary fat on 899
Oxidation, as a *measure of bile acid formation in man* 850
Ruminal hydrogenation of, in sheep 244
Synthesis in germfree rats, influence of cholestyramine 972
Synthesis in liver in vivo, effect of Triton WR 1339 injection 489
Total exchangeable mass, estimation of in man 94

Turnover, in man, determined by sterol balance and input–output analysis 94
Cholesterol oxidase: Use of in determination of cholesterol in cultured cells 1068
Cholesteryl ester(s)
Chylomicrons enriched in, metabolism of 705
Hydrolysis of, in rat adrenal cells, induction by ACTH 570
Role of in steroidogenesis in rat adrenal cortical cells 570
Cholesteryl ester hydrolase: Activity, enzymatic assay for 913
Cholesteryl esterase: Lysosomal, activity of in rat liver 635
Cholestyramine
Effect on metabolism of endogenous triglyceride in hyperlipoproteinemia 1017
Effect on microsomal steroid-8-ene isomerase 375
Effect on synthesis of cholesterol and bile acids in germfree rats 972
Choloyl-CoA synthetase: In rat liver, measurement and subcellular distribution 24
Chromatography, agarose gel: Of plasma lipoproteins of cynomolgus monkeys 992
Chromatography, column
Of phosphorylated derivatives of phosphatidylinositol on immobilized neomycin 1063
Of rat lipoproteins on Sepharose CL-6B 107
Chromatography, DEAE-silica gel: Of gangliosides and neutral glycosphingolipids 390
Chromatography, gas–liquid
Capillary, analysis of bile acids in serum and bile 771
And chemical ionization mass spectrometry analysis of fatty acid methyl esters by 166
Of dimethyl acetals of aldehydes derived from alk-1-enyl lipids 57
Of isopropylidene derivatives of *O*-alkyl glycerol 57
And mass spectrometry, of bile acid methyl ester acetates, use of Poly S-179 280
And mass spectrometry, of oxygenated steroids 933
And mass spectrometry of trimethylsilyl ethers of bile alcohols 956
Of methyl esters of bile acids and keto bile acids 505
Of oxygenated steroids 933
Of trifluoroacetate derivatives of bile acid methyl esters 443
Chromatography, high performance liquid
Of perbenzoylated glycosphingolipids 910
Reverse-phase, of conjugated bile acids 510
Chromatography, high-pressure liquid
Reverse-phase, of natural retinoids 32
Reverse-phase, resolution of sterols by 742
Chromatography, liquid: Of oxygenated steroids 933
Chromatography, liquid gel: Of adipocyte free and esterified cholesterol 774
Chromatography, thin-layer
Of gangliosides 863
Of gangliosides and neutral glycosphingolipids 390
Of human liver gangliosides 538
Multiple two-dimensional, of brain lipids 916
Of oxygenated steroids 933
Of sphingosine diastereoisomers 250
Chylomicrons(s)
Apoproteins of, localization in rat intestinal epithelium 260
Cholesterol-enriched, metabolism of 705
Mesenteric lymph, composition of proteins of 712
Remnants, removal and degradation by the isolated perfused liver 635

D

DEAE–silica gel: Preparation of 390
Desmosterol: Enzymatic conversion from cholesterol 742
Diabetes mellitus: Effect of [^{14}C]palmitate uptake in isolated rat liver mitochondria 688
Diacylglycerol hydrolase: Activity in adipose tissue, use of monoacylmonoalkylglycerol as substitute 654
Dicarboxylic acids
Formation of in livers of starved rats 585
Formation of in rat and monkey liver 591
Diet
High carbohydrate, effect on lipids, insulin, and glucagon, in rats 423
High fat, effect on lipids, insulin, and glucagon, in rats 423
Dietary fat
Composition, effect of on Ehrlich ascites tumor fluid lipoproteins 457
Effect of on cholesterol metabolism in ruminants 899
2,2-Dimethoxypropane: As an esterifying agent for bile acids 783
Diphosphatidylglycerol: Conversion to bis(monoacylglyceryl) phosphate by lysosomes 309

E

Ehrlich ascites cells: Abnormality in ether lipid content of cell membranes 57
Ehrlich ascites tumor fluid: Lipoproteins, effect of dietary fat on 457
Electroimmunoassay: Of human A-I 383
Electron microscopy
Of hepatocytes of clofibrate-treated rats 154
Of liposomes 289
Of rat adipose tissue cells 316
Of rat diaphragm tissue 423
Electrophoresis
Polyacrylamide gel, of pancreatic lipase 1032
SDS–polyacrylamide gel, of apolipoproteins of chylomicrons 712
SDS–polyacrylamide gel, of apoproteins of rat mesenteric lymph chylomicrons 1038
Enterohepatic circulation: Of steroids in the rat 856
Enzymes: Introduction into cells by means of liposomes. A review 289
Ether lipids: In surface membranes of Ehrlich ascites tumor cells 57
Exchange: Of apoC and phospholipids between VLDL and HDL, effect of temperature and plasma 229

F

Fatty acid(s)
Binding to albumin 841
Free, displacement from albumin, effect of CPIB and warfarin 933
Free, in rat, a comparison of procedures for determination of 103

Free, in serum or plasma, semiautomated estimation of 274
Methyl esters, analysis by GLC–chemical ionization mass spectrometry 166
Molecular weight distribution of, determination by chemical ionization mass spectrometry 12
Monomer activity in mixed micellar solutions 207
ω-Oxidation of, quantitative importance 585
ω-Oxidation of, in rat and monkey liver 591
Synthesis in vivo in mice, effect of fasting and refeeding 879
Unsaturation, determination of double bond positions by chemical ionization and mass spectrometry 172
Uptake, in isolated rat liver mitochondria 688
Fasting: Effect of on [^{14}C]palmitate uptake in isolated rat liver mitochondria 688
Fat cells: Human adipose tissue, size of and level of cyclic AMP 613
Fatty alcohol: Monomer activity in mixed micellar solutions 207
Fibroblasts
Cultured, normal and in homozygous familial hypercholesterolemia, content of phospholipids and gangliosides 304
Exposed to cholesterol-enriched HDL, esterified cholesterol accumulation 350
Transformed mouse, ganglioside uptake and choleragen responsiveness, effect of serum 77
Uptake and degradation of HDL and LDL by 644
Fluidity: Of VLDL and HDL of Ehrlich ascites tumor fluid 457
Fluorescent probe
N-4-Nitrobenzo-2-oxa-1,3-diazole-phosphatidylethanolamine 222
For phospholipid regions of membranes 222
Fractional catabolic rate
Of LDL-triglyceride in man 978
Of rat LDL apoprotein 628
Fractional turnover rate: Of triglyceride in hyperlipoproteinemia 1017
Fucolipids: A review 131

G

Gallstones: Effect on, of ursodeoxycholic acid administration to patients 723
Ganglioside(s)
In fibroblasts, normal and in homozygous familial hypercholesterolemia 304
G_{M3}, human liver, isolation and characterization of 538
Of human, cat, and rabbit spinal cords and cord myelin 863
Isolation of by DEAE-silica gel chromatography 390
Uptake by transformed mouse fibroblasts, effect of serum 77
Germfree rats: Influence of cholestyramine on synthesis of cholesterol and bile acids 972
Glass beads: Siliconized use of in purification of pancreatic lipase 1032
GLC–MS: *see* **Chromatography, gas-liquid, and mass spectrometry**
Glucagon levels: In rats adapted to high-fat and high-carbohydrate diets 423
Glucose: Dietary, lipogenesis from, in mouse liver and carcass 879
Glycerolipid metabolism: Participation of aryl-substituted acids in 3
Glycosphingolipids
Neutral, isolation of by DEAE-silica gel chromatography 390
Neutral, TLC of 390
Perbenzoylated, microanalysis of by HPLC 910

H

HDL: *see* **High density lipoprotein**
Heart: Rat, free fatty acids in 103
Hematoside: Human liver, isolation and characterization of 538
Hemolysis: In the rat, effect of hypervitaminosis A on 332
Heparin–manganese precipitation: Of apoB-containing lipoproteins, an evaluation 65
Hepatocytes
Exposed to cholesterol-enriched HDL, esterified cholesterol accumulation 350
Isolated, rat, secretion of bile acids by 985
Hepatoma
Cells, exposed to cholesterol-enriched HDL, esterified cholesterol accumulation 350
Morris 7777, CTP:phosphatidate cytidylytransferase localization 553
High density lipoprotein(s)
A-I and A-II, comparison of two methods to investigate metabolism of in humans 656
Cholesterol, evaluation of heparin–manganese precipitation procedures for estimating 65
Enriched in cholesterol, stimulation of cholesterol esterification in tissue culture cells 350
Human, apoprotein of, dynamic properties 383
Labeled, turnover of in rats 107
Labeling of with [^{3}H]acetic anhydride 107
Labeling of by specific lecithins 495
Quantitation in hypertriglyceridemic samples of plasma 65
Uptake and degradation of, by fibroblasts 644
And VLDL, exchange of apolipoprotein C and phospholipids between 229
Homozygous familial hypocholesterolemia: Fibroblasts, uptake and degradation of HDL 644
Hydrocarbons: Of uropygial gland secretions of grebes 148
7α-Hydroxylase
Activity in liver microsomes of germfree rats, effect of cholestyramine 972
Effect of dietary triglycerides on 359
Hydroxylation
7α-Hydroxylation of 3-oxygenated C_{27}-, C_{28}-, and C_{29}-steroids in rat liver 933
26-Hydroxylation of C_{27}-steroids, effect of biliary obstruction 237
Mitochondrial, adrenal, effect of ascorbic acid deficiency 695
Of terminal carbon of fatty acids 585, 591
3-Hydroxy-3-methylglutaryl coenzyme A reductase
Activity in liver, increase after Triton WR 1339 489

Activity in liver microsomes of germfree rats, effect of cholestyramine 972
Cyclic AMP-sensitive activation of in liver 747
3α-Hydroxysteroid dehydrogenase: In assay for total bile acids in bile 924
Hyperlipoproteinemia
Bile acid kinetics in various types of 1004
In cholesterol-fed cynomolgus monkeys 992
Effects of cholestyramine and chenodeoxycholic acid on metabolism of triglyceride 1017
Kinetic studies of lipoproteins in 38
Serum bile acid concentrations in 527
Hypervitaminosis A: In the rat, effect of on hemolysis and lipid peroxidation 332
Hypolipidemic compounds: Participation in glycerolipid metabolism 3

I

Immunofluorescence: In studies of lipid absorption in the rat 260
Input–output analysis: Of cholesterol in man, determination of cholesterol turnover 94
Insulin levels: In rats adapted to high-fat and high-carbohydrate diets 423
Interfacial oxidation: Of α-tocopherol 416
Intestinal cells: Isolated, lipid synthesis in 433
Intestinal epithelium: Rat, chylomicron apoprotein localization within 260
Isoelectric focusing
Analytical, quantification of apoC-II and apoC-III of human VLDL 1047
Of apolipoproteins of chylomicrons 712
Isomerase, steroid-8-ene: Microsomal, characterization of 375
Isotope ratio method: For measuring cholesterol absorption in man 82

K

Ketone bodies: Effect of on fatty acid uptake in isolated rat liver mitochondria 688
Kinetics
Of squalene in plasma lipoproteins 827
Studies of apoB and apoC lipoproteins in normal and hyperlipoproteinemic subjects 38

L

LDL: *see* **Low density lipoprotein**
Lecithin
And bile salts, ratios in bile 945
Preparative isolation of 922
Linoleic acid: In platelet phospholipids, turnover of 495
Linoleic acid hydroperoxide: Reaction with thiobarbituric acid 1053
Lipase: Hydrolysis of diol ester waxes by 894
Lipid(s)
Absorption, study of using fluorescence antibody techniques 260
O-Alkyl, in surface membranes of Ehrlich ascites tumor cells 57
Biliary, effect of ursodeoxycholic acid administration on composition of, in patients 723
Neutral, of rat heart 103
Nomenclature, recommendations of IUPAC-IUB Commission on Biochemical Nomenclature 114
Peroxidation, in the rat, effect of hypervitaminosis A on 332
Peroxides, reaction with thiobarbituric acid 1053
Serum, in rats adapted to high-fat and high-carbohydrate diets 423
Serum and liver, effect of clofibrate in rats 154
Surface, of mice and hamsters, distribution of fatty acids in 1,2-alkanediol diesters of 894
Synthesis in isolated intestinal cells 433
Lipogenesis: From dietary glucose, in mouse liver and carcass 879
Lipolysis
In adipocytes, effect of CPIB and warfarin 1025
In isolated rat adipocytes, effect of acetate, acetaldehyde, and ethanol in 737
In muscle and adipose tissue, in rats adapted to high-fat and high-carbohydrate diets 423
Lipoprotein(s)
Apoproteins, metabolism of 667
Ehrlich ascites tumor fluid, effect of dietary fat on 457
^{125}I-Labeled, direct measurement of apoB specific activity in 578
Kinetic studies in man 38
Lipid, levels of in the rat 544
Plasma, distribution and kinetics of squalene in 827
Rat, chromatography on Sepharose CL-6B 107
Lipoprotein lipase: Of perfused heart and adipose tissue, catabolism of chylomicron triglyceride by 705
Liposomes
Introduction of enzymes into cells, A review 289
In vivo fate of 289
Lithogenic index
Critical tables for derivation of 945
Effect on of ursodeoxycholic acid administration to patients 723
Low density lipoprotein
Catabolism of apoprotein of, by the isolated perfused liver 628
In cholesterol-fed cynomolgus monkeys 992
Elucidation of structure of by proteolytic digestion 478
Formation in the rat, independent of VLDL metabolism 342
Formation from VLDL in the rat 342
Kinetics in man 978
Radioimmunoassay of apoB, rhesus monkey 197
Uptake and degradation of, by fibroblasts 644
LPL: *see* **Lipoprotein lipase**
Lysosomes: Conversion of diphosphatidylglycerol to bis(monoacylglyceryl) phosphate by 309

M

***Macaca fascicularis*:** Male–female variability in dietary cholesterol-induced hyperlipoproteinemia 992
***Macaca mulatta*:** Measurement of serum apoB by radioimmunoassay 197
Mannosyl retinyl phosphate: In rat liver and intestine 619
Mass fragmentography: Determination of serum bile acid concentration by 527

Mass spectrometry
Chemical ionization, determination of cellular fatty acid distribution by 12
Chemical ionization, of trimethylsilylated methyl esters of unsaturated fatty acids 172
Chemical ionization and GLC, analysis of fatty acid methyl esters 166
Chemical ionization and GLC, determination of double bond positions in unsaturated fatty acids 172
Direct inlet–chemical ionization of TMS derivatives of cerebrosides 370
And GLC, of bile acid methyl ester acetates, use of Poly S-179 280
And gas–liquid chromatography of trimethylsilyl ethers of bile alcohols 956
Of methyl ester trimethylsilyl ether derivatives of rat bile acids 177
Membrane receptors: Of transformed mouse fibroblasts 77
Mesenteric lymph: Apolipoproteins A-I and ARP 1038
***trans*-Methylglutaconate shunt:** Of mevalonate metabolism, in calves 836
Mevalonic acid: Formation of sterols from, in calves 836
Micelles: Of bile salts, activity of fatty acid and fatty alcohol monomers 207
Microsomes
Lung, phosphatidate phosphohydrolase 467
Steroid-8-ene isomerase of cholesterol biosynthesis, characterization of 375
Mitochondria: Rat liver, uptake of [^{14}C]palmitate in 688
Monacylmonoalkylglycerol: Substitute for diacylglycerol hydrolase activity in adipose tissue 654
Monolayers, mixed: Of cholesteryl oleate and triolein, properties of at air–water interface 325
Morphometric parameters: Hepatic, of normal and clofibrate-treated rats 154
Multicompartmental analyses: Of endogenously labeled LDL in man 978
Myelin: Spinal cord, human, cat, and rabbit, gangliosides of 863

N

Neomycin: Coupled to glass beads, purification of phosphorylated derivatives of phosphatidylinositol 1063
Nomenclature: Of lipids, recommendation of IUPAC-IUB Commission on Biochemical Nomenclature 114

O

Obesity
Effect of on rat adipose cell size and number 269
In the PBB/Ld mouse 335
Optical rotary dispersion: Of ceramides and sphingosines 250
Oxidation
Of [24,25-^{3}H]cholesterol in man as a measure of bile acid formation 850
ω-Oxidation of fatty acids, quantitative importance 585
ω-Oxidation of fatty acids by rat and monkey liver 591

P

Pancreatic lipase: Purification via affinity for bile salts and apolar surfaces 1032
PBB/Ld mouse: Description of obesity 335
Pentadecan-2-one: Effect of on growth of *Clostridium butyricum* 757
Perfused liver, rat Catabolism of LDL apoprotein by 628
Removal and degradation of chylomicron remnants 635
Peroxidation: Of polyunsaturated fatty acids 1053
Phosphatidate phosphohydrolase: In lung microsomes, role of in pulmonary surfactant synthesis 467
Phosphatidyl-CMP: Radioactive, biosynthesis of 778
Phosphatidylethanolamine: Synthesis and properties of a fluorescent derivative of 222
Phosphatidylinositol: Phosphorylated derivatives of, purification by chromatography on immobilized neomycin 1063
1-Phosphatidylinositol 3,4-biphosphate: Purification by chromatography on immobilized neomycin 1063
1-Phosphatidylinositol 4-phosphate: Purification by chromatography on immobilized neomycin 1063
Phosphodiesterase: In rat adipocyte ghosts 729
Phospholipid(s)
C, exchange between rat plasma VLDL and HDL 229
Exchange between plasma and platelets 495
In fibroblasts, normal and in homozygous familial hypercholesterolemia 304
Metabolism, CDP-diglyceride-dependent enzymes of, spectrophotometric assay 519
Phospholipase A_2
Activity in platelets 793
From an inflammatory exudate, isolation and characterization 18
Platelets
Human, turnover of phospholipid linoleic and arachidonic acids 495
Role of lipids in function of, a review 793
***Podicipediformes* species:** Hydrocarbons and multibranched ester waxes from uropygial gland secretion of 148
Preadipocytes: From rat adipose tissue, isolation and characterization 316
Primates, nonhuman: Males and females; hyperlipoproteinemia in 992
Prostacyclin: Formation from arachidonic acid 793
Prostaglandin endoperoxide synthetase: Inhibition of by aspirin and indomethacin 793
Protein kinase: Phosphorylation of sterol ester hydrolase by 561
Proteolysis: Of LDL in elucidation of structure 478
Pulmonary surfactant
In Chediak–Higashi syndrome 410
Synthesis, involvement of phosphatidate phosphohydrolase in lung microsomes 467
Puromycin: Effect on hepatic triglyceride formation in day-old rats 763

R

Radioimmunoassay
Measurement of serum apoB, rhesus monkey 197

Of serum ursodeoxycholic acid 443
Radioiodination
Of HDL, apoA-I, and apoA-II 656
Of LDL 629
Of VLDL 38, 579
Retinoids: Separation by high-pressure reverse-phase liquid chromatography 32
Ruminal hydrogenation: Of cholesterol in sheep 244
Ruminants: Effect of dietary fat on cholesterol metabolism in 899

S

Scurvy: Effect of on adrenal mitochondrial hydroxylations in guinea pigs 695
[^{3}H]β-Sitosterol: Use of measuring cholesterol absorption in man 967
Sphingolipidoses: A review 401
Sphingosine: Stereospecific, total synthesis of 250
Squalene: Distribution in plasma lipoproteins 827
Stearic acid, 5-doxyl: Binding isotherms for interaction of, with albumin 841
Steroid(s)
C_{27}, effect of biliary obstruction on 26-hydroxylation 237
Excretion in cholesterol-fed guinea pigs 448
Mono-, di-, and trioxygenated, chromatographic properties 933
Of 2000-year old human coprolites 215
Sterol(s)
Balance, in man 82
Balance, in man, determination of cholesterol turnover by 94
Resolution, by reverse-phase high-pressure liquid chromatography 742
Synthesis, cyclic AMP-sensitive activation of 747
Synthesis from mevalonate in calves 836
Sterol ester hydrolase
Bovine adrenal cortex, protein kinase-mediated phosphorylation of 561
Bovine adrenal cortex, purification of 561
Sulfated bile acids: 5α, occurrence in rat bile 177
Surface properties
Of mixed monolayers of cholesteryl oleate and triolein 325
Of oxidation products of α-tocopherol 416

T

Tetramethylurea: Use of in direct measurement of specific activity of ^{125}I-labeled apoB 578
Thiobarbituric acid: Reaction with linoleic acid hydroperoxide 1053
Tissue culture cells: Exposed to cholesterol-enriched HDL, esterified cholesterol accumulation 350
TLC: *see* **Chromatography, thin-layer**
TMS: *see* **Trimethylsilyl**
α-Tocopherol: Interfacial oxidation of 416
Triglyceride
Of cholesterol-enriched chylomicrons, catabolism of by LPL of perfused heart and adipose tissue 705
Dietary, effect on 7α-hydroxylation and cytochrome P-450 359
Endogenous, effect of cholestyramine and chenodeoxycholic acid on metabolism of 1017
Endogenous, metabolism of in relation to bile acid kinetics in various types of hyperlipoproteinemia 1004
Fractional turnover rate in hyperlipoproteinemia 1017
LDL, endogenously labeled, fractional catabolic rate in man 978
Liver, metabolism of, age-related changes, in the rat 763
Muscle, in rats adapted to high-fat and high-carbohydrate diets 423
Trimethylsilyl derivatives: Of cerebrosides, characterization of by mass spectrometry 370
Trimethylsilyl ethers: Of bile acids, capillary GLC of 771
Triparanol: Administration to rats to determine sources of cholesterol and bile acids in bile 872
Triton WR 1339: Effect of on hepatic HMG CoA reductase activity and in vivo cholesterol synthesis 489
Trypsin: As a probe of the structure of LDL 478
Turnover: Of apoB of VLDL and LDL in rats 342

U

Uropygial gland: Of grebes, hydrocarbons and multibranched ester waxes in secretion of 148
Ursodeoxycholic acid
Effect of administration of, on biliary lipids and bile acids 723
Serum, in normal subjects and patients with hepatic disease 443
Serum, radioimmunoassay 443

V

Very low density lipoprotein
Conversion to LDL in the rat 342
And HDL, exchange of apolipoprotein C and phospholipids between 229
Human, quantification of apoC-II and apoC-III by electrofocusing 1047
Radioiodination and turnover 38
Vitamin A: Effect of on hemolysis and lipid perioxidation 332
Vitamin D_3: Binding by calciferol-binding proteins from kidney 601
VLDL: *see* **Very low density lipoprotein**

W

Warfarin: Antilipolytic effect in adipocytes 1025
Waxes: Multibranched ester, of uropygial gland secretions of grebes 148

NEW METHODS INDEX

Volume 19, Numbers 1–6

Compiled by H. A. I. Newman and P. Newman

The numbers in this index refer to entry numbers in the New Methods listings, which are found on the pages of Volume 19 given below.

Nos. 1–56, pp. 111–113
Nos. 57–89, pp. 284–285
Nos. 90–138, pp. 396–398
Nos. 139–183, pp. 523–525
Nos. 184–263, pp. 662–665
Nos. 264–295, pp. 788–789
Nos. 296–356, pp. 929–931
Nos. 357–408, pp. 1071–1073

ENTRY NO.

Acetate: GLC of 204
Acetoacetate: Analysis on the LKB 8600 reaction rate analyzer 366
β-*N*-Acetyl-D-glucosaminidase: Purification of horseshoe crab by affinity chromatography 96
***N*-Acetylneuraminic acid:** 9-*o*-Acetyl demonstrated in brain gangliosides from vertebrates 325
Acylglycerols: Preparation through the use of lipolytic enzymes 322
Aflatoxin B_1
TLC of in corn, separation from ochratoxin A and zearalenone 357
Chromatographic determination in eggs 358
Aflatoxins
Fluorometric detection after HPLC 57
Screening method for detection in cereals 139
Alcohols, fatty: HPLC with UV detection 364
***n*-Alkanes:** Diffusion and partition in dimethylsilicone stationary phases 118
Alkenes: Alpha, omega synthesis by partial ozonolysis of cyclic oligomers of 1,3-dienes 25
Antioxidants: GLC of in fats, oils, and dried food products 359
Antirachitic agents: Bioassay, in vitro 6
Apoproteins
A-I, fluorescence polarization studies of human and rhesus 169
A-II, content of HDL by radioimmunoassay 282
B, comparative determinations 337
inhibition enzyme immunoassay for human 387
radioimmunoassay—comparison of immunoreactivities of rhesus and human LDL 234
G, isolation and partial characterization 336
Quantitation in Tangier disease 32
Arachidonic acid: Soybean lipoxygenase-2 conversion to 9(12)-oxy-8,11,15-trihydroxyeicosa-5,13-dienoic acid 287
3-β-Benzoyloxy-14α,15α-epoxy-5α-cholest-7-ene: Synthesized as intermediate for 15-oxygenated sterols 88
Bile acid
Methyl ester acetate, evaluation of poly-179 as a stationary phase for GLC–MS 187
Serum by GLC 186
Sulfates, TLC 361

ENTRY NO.

Bile acids
Converted to 24-nor-5β-chol-22-enes by oxidative decarboxylation 296
Conjugated, HPLC-reversed phase in human bile and duodenal fluid 360
HPLC-reversed phase determination of 404
routine determination of glycine and taurine 188
synthesis of glycine 91
synthesis of taurine 91
Dual beam enzymatic spectrofluorimetric method on serum 264
Fluorimetric quantitation of total, in serum 297
Synthesis of 24-^{13}C 92
Urinary, separated on lipophilic ion exchange resin and GLC–MS 90
[6β-^{82}Br-methyl]-19-norcholest-5(10)-ene-3β-ol: Synthesis of 84
Butylated hydroxy anisole: Separation of isomers on Sephadex LH-20 1
Carboxy methylstearate: Synthesized from methyl 9(10)-formylstearate 313
Carboxylic acids: Automated determination by an ion exchange chromatography with specific color reaction 151
Carbohydrates
Periodate oxidation of water-insoluble, with pyridine as the reaction solvent 382
Quantitative TLC with pentavalent vanadium in sulfuric acid 324
Soluble, analyzed by HPLC in defatted oilseed flours 162
Structure, conformation, and interactions by use of ^{13}C 219
Substituted, HPLC 383
Synthesis of spin-labeled 329
Cardiolipin
Spin-labeled stereospecifically, specific enzymatic hydrolysis 285
Synthesis of by means of cyclic enediol pyrophosphates 178
Cell surface: Reagents specific for and components of 241
Ceramides: GLC–chemical ionization MS of Gaucher spleen, separation from glucosyl sphingosine and cerebrosides 68

ENTRY NO.

Cerebroside analogs: Synthesized from 3-phenylserines 71
Cerebrosides: GLC–chemical ionization MS of Gaucher spleen, separation from glucosyl sphingosine and ceramides 68
Chenodeoxycholic acid: Conjugated, TLC separation from conjugated deoxycholic acid 185
24-nor-5β-Chol-22-enes: Synthesized from bile acids by oxidative decarboxylation 296
Cholanic acid derivatives: 20β-H compounds synthesized 298
Cholanoates, 5-alpha-: In rat bile 184
24 (*R*) and 25(*S*)-5-beta-Cholestane-3-alpha,7-alpha, 24-triols: Synthesis by a hydroboration procedure of 258
25(*R*) and 25(*S*)-5-beta-Cholestane-3-alpha,7-alpha,26-triols: Synthesis by a hydroboration procedure of 258
5α-Cholest-8(14)-en-3β,15α-diol: Synthesis of from a sterol epoxide 87
Cholesterol
- Analysis comparisons among 12 lipid research clinics 294
- AOAC standard method for, applied to a wide variety of foodstuffs 408
- Enzymatic determination of 53
- Enzymatic determination of, amperometric determination in serum with immobilized cholesterol ester hydrolase and cholesterol oxidase 82
- Enzymatic determination of, bilirubin and hemoglobin interferences of 259
- Enzymatic, calibration of automated 350
- Enzymatic, determination of, interferences in serum with five reagent kits 89
- Enzymatic determination of, kinetic method with 2,2′-azino-di-3[ethylbenzthiazolin sulfonic acid] 85
- Enzymatic determination on discrete automatic analyzers 295
- Enzymatic determination of, with Greiner selective analyzer 179
- Enzymatic measurement in HDL separated by Mg^{2+}/dextran sulfate 389
- HPLC separation from dolichols and ubiquinone 261
- 7-Hydroxy, determination of 2
- (22*R*)-22-Hydroxy, determination of 2
- 26-Hydroxy, determination of 2
- In water, determination by GLC–MS with multiple ion detector 138
- LDL, direct determination of with polycations 293
- Microdetermination in serum lipoproteins 49
- Oxidation with Cr_2O_6–pyridine complex 51
- Oxygenated derivatives microdetermined 355
- Picomole determination of free and total in cultured cells 406
- Serum analysis, intra- and interlaboratory comparisons of 257
- Trichloroacetic acid and antimony trichloride color reaction 352
- Water-soluble derivative as a standard and quality control serum additive 181

ENTRY NO.

Cholesterol digitonide: Continuous flow analysis of 292
Cholesteryl acetate: MS, characteristic fragmentation of 137
Cholesteryl isononatriacontonate: Wool wax 260
Chromatofocusing: Isoelectric focusing on ion-exchange columns 301,302
Chromatography
- Affinity to isolate antibodies to steroid hormones on antigen-linked Sepharose, efficient electrophoretic elution 141
- Column, efficient detector for volatile solvents 300
- Gel, density measurement as a method of detection 303
- Infrared detectors for 14
- Mass spectrometry detector for 12
- Photoionization detector for 13

Chromatography, gas–liquid
- Atomic absorption coupled 18
- Automated glass capillary 158
- Column packer for 159
- Column packing for, by coating the solid support with volatilized stationary phase 209
- Compound selective mass spectrometric detector 17
- Element selective electrolytic conductivity detector for 16
- Ionization detector for carbon, nitrogen, and phosphorus in 15
- Mass-spectrometric automated simultaneous qualitative and quantitative analysis of complex organic mixtures 208
- Parallel flame ionization detection–total ion current recording in capillary GLC–mass spectrometry 11
- Two dimensional 207

Chromatography, high-pressure liquid
- Fluorescence detection for 28,29
- Scanning spectrophotometer for 222
- Specific detection by absorbance ratioing with a spectrophotometric detector 30
- UV and d.c. argon-plasma emission spectroscopic detection 166

Chromatography, thin-layer
- Argentation, improved preparation 56
- Direct transfer of fractions into vials 183
- High performance, programmed 182
- Micro, automated fluorometry of 356
- Plastic foil for small scale 55

Coprostanol: In water, determination by GLC–mass spectrometry equipped with multiple-ion detector 138
Deoxycholic acid: Conjugated, TLC separation from conjugated chenodeoxycholic acid 185
Desmosterol
- Isolation and identification in animal brain tissue 50
- Synthesis of, from hyocholic acid 354
- Synthesis of 403

Detergent peroxides: Interfering factors in biochemical analysis 142
Detergents: Nonaqueous titrimetric analysis of alkylbenzene sulfonic acids 304
Diacylglycerols: Lung, improved assay 265

ENTRY NO.

1,2-Dialkylglycerols: GLC of trimethylsilyl derivatives 216
Digalactosyl diglyceride: Separation from monogalactosyl diglycerides and lecithin by TLC and determination 211
Disaccharides, hexose amine containing: Separation from hexosamine, hexosaminitol, and hexosamine containing trisaccharides on an amino acid analyzer 21
Docosenoic acid: Mass fragmentographic determination of, in rape seed oils 271
Enzyme activities: Reliability of in Federal-Republic-of-Germany-results of interlaboratory tests 310
Enzymes
Cytidine 5′-diphospho-12-diacyl-*sn*-glycerol-dependent of phospholipid metabolism, spectrophotometric determination 362
Lipid metabolic, affinity chromatographic separation 189
Epidesmosterol: Synthesis of, from hyocholic acid 354
Esterase: Acid, 4-methylumbelliferyl palmitate as a substrate 307
Fat content: Solid, determined by pulsed nuclear magnetic resonance 319
Fats and oils: Electrophoretically separated from solids 230
Fatty acid amines: TLC with soap 396
Fatty acid esters
Acetylated pentaerythritol 105
Cis and *trans*, Sterospecific synthesis 63
Furanoid, are synthesized from naturally occurring unsaturated fatty esters 9
Octacyclohexenyl unsaturated, synthesized from methyl octadecadiynoates 62
Unsaturated oxycyclopentenyl, synthesized from methyl octadecadiynoates 62
Unsaturated thiocyanations (iron-catalyzed) of 370
Celite–potassium methylate for rapid preparation of from glycerides 205
Fatty acid methyl esters
GLC on Silar 10C, Silar 9CP, SP 2340, and OV-275 101
GLC–chemical ionization mass spectrometry of 202
Hydrogenolysis, selectively by various hydrogen donors 318
Hydroxy, silver resin chromatographic separation 371
Long chain, capillary GLC 197
Fatty acid monolayers
Autooxidation nature of adsorption sites on silica gel 156
Adsorbed on silica gel, rates and products 157
Fatty acids
Acetylenic, TLC 103
Acetylenic isomers of separated from unsaturated by silver resin chromatography 368
Cyclic, identification in fractionated tall oil 315
Dienoic, double bond analysis 369
Esterification rates by GLC as identifiers 206
Flue-cured tobacco by preparative TLC–GLC 367

ENTRY NO.

Hydrogen atoms, distribution determined in biosynthesized, with specifically deuterated NADPH or deuterated water by GLC–mass spectrometry 372
Polyunsaturated, *cis*-bond producing hydrogenation with polymer–complexed $Cr(CO)_3$ catalysts 363
Red blood cell by GLC 200
Separation and identification as antiinflammatory principle from *Streptomyces sp.* 317
Short chain, C_2–C_3, GLC with carbopack B–carbowax 20M–phosphoric acid 314
Trans, GLC on packed columns 365
Tri-unsaturated *cis*, synthesis of 273
Cis unsaturated separated from *trans* unsaturated by packed glass capillary columns 201
Unsaturated, conjugated dienes determined with tetracyano ethylene-^{14}C 155
Unsaturated double bond positions by MS 203
Unsaturated, microassays 312
Unsaturated monoeneoic, mass spectrometry of *iso* and *antiiso* 60
Unsaturated octadecenoic, chemical ionization MS, determination of geometric and positional isomers 100
Unsaturated thiocyanations (iron-catalyzed) of 370
Fatty aldehydes: Chromic acid–celite columns for micro and semimicro preparation 106
Free fatty acids
Colorimetric determination of, in blood 272
GLC 316
Plasma, fluorimetric determination 61
Serum, determined with a stable cupric reagent 64
Serum, semiautomated novel method 199
Fetal lung maturity: Lecithin/sphingomyelin ratio vs. corisol and foam test assays 177
Fructose: Analyzed in the presence of glucose and mannose 70
L-Fucose: A sensitive spectrophotometric detection method 165
Fucosphingolipids: Structural studies on branched from hog gastric mucosa 24
α-D-Galactopyranoside: GLC of 15 methyl ethers of 381
Galactose-1-phosphate uridyl transferase
Electrophoresis by improved technique 192
Enzymatic micromethod in human erythrocytes 267
Gangliosides
Assay after TLC 277
Chromatographic approach to the resolution and mapping 218
Isolation and determination of long-chain bases 67
Separated by DEAE-silica gel chromatography of 326
Trichloroacetic and phosphotungstic acid effects on TLC mobility 164
Trisialo, isolation and characterization of novel 20
Tritium labeling of 330
Glucose
Analyzed in the presence of fructose and mannose 70
In lipid extracts from human liver 229
β-Glucosidase: Affinity chromatographic purification 268
Glucosyl sphingosine: GLC–chemical ionization

ENTRY NO.

mass spectrometry of Gaucher spleen, separation from ceramides and cerebrosides 68
Glycerol
Enzymatic semi-automated assay 19
Radioenzymatic assay with ion exchange column chromatography 299
Glycerols: *O*-Alkyl, separation by TLC of 262
Glycerophospholipid: Synthesis by improved methods with new photoactivable groups 163
Glycerophosphoryl headgroup: Raman spectra and conformation 133
Glycolipid: Carbohydrate residues by GLC 220
Glycolipids
Mass fragmentographic structure determination of blood group 377
Microfluorometry, analysis of PAS fluorescence 378
Neutral, separated by DEAE-silica gel chromatography of 326
Glycosphingolipids
Neutral by HPLC of perbenzoyl derivatives 116
Quantitative determination 114
Quantitative determination in erythrocyte membranes 69
Synthesis from glycerol derivatives by orthoesters and alpha-acylhalogenases of *d*-mannose 274
Halogens, organic: Detection in lipids 27
Hepatic lipase: Assay for 97
Hexane: Rapid determination in oils by GLC after pyrolysis 117
Hexosamines: Separation from hexosaminitol, and hexosamine-containing di- and trisaccharides on an amino acid analyzer 21
Hexosaminidase
Characterization of in Sandhoff's disease with man–Chinese hamster cell hybrids 190
β-, tear by automated method 58
Hexosaminitol: Separation from hexosamine, and hexosamine-containing di- and trisaccharides on an amino acid analyzer 21
Hydrocarbons
Aromatic C_6–C_8, by GLC on *N*-methyl pyrrolidone 278
GLC on inorganic eutetic columns 225
HPLC on Spheron P-300 224
Monoterpene, GLC on modified graphitized carbon black 384
Polycyclic aromatic, GLC separation from carbazoles and acridines 333
Polycyclic aromatic in particulate matter by glass capillary GLC 167
Trace, determined in marine biota 332
Trace in marine sediments, interlaboratory comparison 223
7α-Hydroxy cholesterol-1,2-^{3}H: Synthesis of 349
3-Hydroxy-3-methylglutaryl coenzyme A reductase: Assay by TLC compared to rapid chloroform extraction assay 94
9-Hydroxy prostaglandin dehydrogenase: Simple, sensitive assay 147
Hyperlipoproteinemia: Type III, acrylamide gel gradient electrophoresis of 388
Lecithin:cholesterol acyltransferase: Colorimetric method of serum 144

ENTRY NO.

Lecithin/sphingomyelin ratio
Amniotic fluid and foam test as criteria for fetal lung maturity 251
Amniotic fluid as a predictor of neonatal distress in pregnant diabetic women 248
Amniotic fluid, comparison with ultrasonic biparietal diameter of 249
For fetal lung maturity, comparison to cortisol and foam-test assay 177
Linoleic acid
9-D-Hydroperoxide prepared by action of tomato fruit lipoxygenase 10
Lipoxygenase conversion to isomeric hydroperoxides 153
Linoleate: Methyl, isomerization with rhodium complexes 107
Lipase
Hepatic, assay method comparisons 59
Lipoprotein, comparison of radiolabeled vs. titration method and triolein vs. intralipid substrate 99
Nephelometric falsely elevated, detection and correction of 145
Purification with hydrophobically coated glass beads 266
Serum, determined with a centrifugal analyzer 309
Lipid free radical: Quantification through spectrofluorescent detection of malonaldehyde in potentiated spinal cord injury 154
Lipoxygenase: ESR studies with spin-trapping and spinlabeling 305
Lipids
Egg yolk, extraction and preparative fractionation of 397
Extracts from human liver, glucose presence 229
Hexane extractable from flue-cured tobaccos 226
Method for reversible removal from membrane-bound enzyme 227
Micro TLC and densitometry 335
NMR study of the inter action of 1-anilino-8-naphthalene-sulfonate 36
Plasma, screening by TLC with flame ionization detection 231
Polar two-dimensional TLC 395
Sebum, liquid chromatographic analysis of 334
Serum, sulfophosphovanillin reaction for 279
TLC with permanent absorbant layers 31
Visualization on TLC by fluorogenic process 119
Lipid spin labels: Nitroxides 239
Lipofuscin: Spectrophotometry and electron microscopy of in testes of aging mice 228
Lipoprotein lipase 95
Assay for 97
Assay method comparisons 59
Lipoprotein phenotyping: Agarose gel electrophoresis, updated 235
Lipoprotein preparation: Specific albumin elimination 233
Lipoproteins
A, radioimmunoassay 120
Apoprotein content of when separated by gel chromatography or ultracentrifugation 121

ENTRY NO.

High density, cholesterol, ultrafiltration step for the heparin–Mn^{2+} quantitation of 393
gradient ultracentrifugation pattern visualized 232
electron microscopy of HDL-3 171
enzymatic measurement of cholesterol in Mg^{2+}/dextran sulfate-separated 389
precipitated by heparin–Mn^{2+} and determination of cholesterol 386
separation of A-I from A-II with thymosulfonphthalein treatment followed by immunoelectrophoresis 338
separation of subfractions by hydroxylapatite chromatography 33
threonine poor, isolation and characterization of two human 391
Human low density, phospholipid–cholesterol interactions from ^{31}P-NMR 394
Iodinated, integrity of plasma by electron microscopy 123
Low density, bullfrog serum, isolation and partial characterization 73
labeled lecithin incorporation in vitro 74
ultracentrifugal heterogeneity 122
Quantification by simplified procedures, a comparison to analytical ultracentrifugation 34
Serum, cholesterol microdetermination in 49
indirect screening for lipid composition 281
Simplified methods compared to analytical ultracentrifugation 321
Tibric acid and clofibrate, effects on lipoproteins 392
Very low density, electrophoretic mobility in agarose of subfractions from Type III hyperlipoproteinemia 168
molecular weight distribution techniques in polydisperse systems 390
radioiodination properties of saturated fat fed to rats 35

Lipoproteins X
Cholestasis diagnosis, a comparison with other biochemical parameters and liver biopsy 280
Oleic acid disruptive influence 170

Lipoxygenase
Determination by bleaching of dichlorophenol-indophenol coupled to linoleate oxidation 308
Purification by affinity chromatography 311

ϵ-Lithocholyl lysine: Identification of in human liver 140

Lyotropic mesophases: Comparison with ordered and disordered paraffinic chains 104

Malonaldehyde: Spectrofluorescent detection of, a measure of lipid free radical damage in response to ethanol potentiation of spinal cord injury 154

Mannose: Analyzed in the presence of glucose and fructose 70

Membrane lipoprotein: Cysteine spin labeling of *E. coli* 240

Membrane models: Fluorescent probes, anthronyl fatty acid derivatives in monolayers and dipalmitoyl phosphatidyl choline liposomes 160

Membranes
Alterations studied in eukaryotic cell 128

ENTRY NO.

1-Analino-8-naphthalene-sulfonate interaction with, by NMR 76
Binding of phenothiazines with by fluorescent probes 75
Corn, labeled with fluorescamine 173
Cyclic nucleotide determination in by 8-azido-adenosine-3′,5′ monophosphate, a photoaffinity probe 78
Erythrocyte, labeled with fluorescamine 173
E. Coli spin labeled, by synthesis of spin labeled phosphatidylglycerol and divalent cation-induced interaction 244
Fluorescence approach to determining diffusion coefficients in a phospholipid monolayer 245
Fluorescent probes used to determine microviscosity in aliphatic environments 124
Immunochemical analysis of inner and outer *E. coli* 243
Inverted vesicles by osmotic lysis of spheroplasts 339
Lateral diffusion based on fluorescence recovery after photobleaching 129
Lateral mobility of all surface by fluorescence recovery after photobleaching 127
Microsomal fractionation based on surface properties 341
NMR validity in determining vesicle bilayer phospholipid surface ratios 126
Phosphatidylethanolamine-containing, polymorphic phases detected by ^{31}P NMR 236
Plasma 1,6-diphenyl-1,3,5-hexatriene pulse fluorometry of mouse leukemic L 1210 cell 342
Plasma from eukaryotic cells isolated on polylysine-coated polyacrylamide beads 174
Plasma saccharide capping of lymphocyte with fluorescein-labeled lectins 340
Polylysine control bead isolation of 238
Structure by nanosecond fluorescence techniques 77

Membrane vesicles: Separation of those bearing different enzymes by freeflow electrophoresis 172

Methyl linoleate
Analysis of autooxidized products by GLC–mass spectrometry 150
Selective hydrogenation by isopropanol 152

Methyl oleate: Analysis of oxidation products by GLC–mass spectrometry 149

Methyl 2,3,5,6-tetra-*o*-methyl-D-glucofuranoside: Electron impact mass spectrometry of 276

Micelles: Monomers of fatty acids and alcohols in 242

Monogalactosyl diglyceride: Separation from digalactosyl diglyceride and lecithin by TLC and determination 211

Monosaccharides: Plasma by TLC 327

Myoinositol: Measurement by selective ion monitoring in single cell or defined neural areas 39

Neuraminidase
Determination in HeLa cells with gangliosides specifically labeled in *N*-acetyl-neuraminic acid 98
Radiometric assay on G_{Dla} ganglioside 146

ENTRY NO.

Ochratoxin: Screening method for detection in cereals 139
Olefin: Synthesis, computer-assisted long-range strategies 385
Oligomers: Aldonic acid-containing, separated from oligomeric sugars on an ion exchange resin 22
Oligosaccharides
Sialyl, ion-exchange chromatography of 331
Specific detection of on TLC 23
9(12)Oxy - 8,11,15 - trihydroxyeicos - 5,13, - dienoic acid: From arachidonic acid treated with soybean lipoxygenase-2 287
Patulin: Screening method for detection in cereals 139
Phosphate: Precolumn synthesis of trimethylsilyl derivatives for GLC 130
Phosphatidylcholine
Molecular species determination of 250
Separated from di- and monogalactosyl diglycerides by TLC and determination 211
Phosphatidylserine: Cation interaction determined with fluorescent probes 125
Phosphatidylethanolamine: Synthesis and properties of highly fluorescent derivatives of 247
Phosphatidylglycerol, enzymatic: Synthesis of spin labeled 244
Phosphoglycolipid: Mycoplasmic membrane localized with specific antilipid antibodies 175
Phospholipase D: Choline oxidase determination of 191
Phospholipids
Aldehydogenic, mass spectrometry of 246
Analogs synthesis, incorporation, and detection in model membranes 198
^{13}C, aryl chain enrichment with *Tetrahymena* 79
Egg yolk, extraction and separation from other lipids 397
Glycerol-containing, determined by mass-spectrometry 38
^{1}H NMR of vesicular membranous; effect of metal ions, cholesterol, and *n*-alkanes 237
Metabolism spectrophotometric determination of cytidine 5′-diphospho-12-diacyl-5*n*-glycerol-dependent enzymes of 362
Molecular species by mass spectrometry–chromatography 132
Semiautomated spectrophotometry in plasma 286
Phosphonosphingoglycolipid: Turbo cornutus visceral, characterization of 115
Phosphorus
Esters, plasma chromatography of 37
Fluorometry for determining picomoles 343
Improved determination 176
Plasmalogen: Ethanolamine, TLC resolution of molecular species 131
Plasma membrane: Isolation from human skin fibroblasts 284
Polyethylene: Determination in fats 26
Prostaglandins
A, derivatives, mass spectrometric determination of 135
GLC–mass spectrometry identification of derivatives 402

ENTRY NO.

Radioassay, technique for rapid antibody and sample preparation 43
13,14-Dihydro-15-keto prostaglandin-F_2 alpha, radioimmunoassay for 47
E, derivatives, mass spectrometric determination of 135
double isotope dilution method for urinary determination of 252
immunohistochemical localization of 347
E_1, 8-*iso*-, stereocontrolled synthesis of 289
radioimmunoassay 48
E_2, 13,14-dihydro-15-keto-, radioimmunoassay of 255
8-*iso*-, stereo controlled synthesis of 289
15-keto-, radioimmunoassay in peripheral plasma 45
DL-Erythro-16-methoxy-, synthesis of 46
Estimation and characterization in human gastrointestinal tract 344
F, double isotope dilution method for urinary determination of 252
F_a cyclic boronate, GLC–chemical ionization mass spectrometry of 136
F-1-alpha-6-keto-, radioimmunoassay for 290
GLC and GLC–mass spectrometry of, with new silylated agents 398
Guidelines for evaluation of RIA methods of 253
H_2 methyl ester synthesis of 401
I_1, 5-hydroxy, synthesis of 4 isomers 291
3-Oxa-4,5,6-tri*nor*-3,7-inter-*m*-phenylene, synthesis by conjugate addition 400
synthesis of photochemically 399
Oximes for HPLC and electron capture GLC 134
Precursors, synthesis of cyclopentenolone precursors to prostaglandins from 2,5-dihydro-2,5-dimethoxy-furans 345
Radioimmunoassay, a review of 254
Seminal fluid, GLC–mass spectrometry with an open tubular capillary column 346
Separation from thromboxanes by one- and two-dimensional TLC 42
Synthesis, new trends in 44
Synthesis of pregnenoic acid derivatives with prostaglandin structural elements 348
Prostaglandin synthetase: Assay in blood platelets 306
Prostanoid endoperoxide model compounds
1,6-Diradicals synthesized from 1,2-dioxanes and cyclic peroxalates 41
Synthesis of 1-oxatri-methylene diradicals 40
Retinols
Cis–trans separation by HPLC 109
Rapid method for determining blood serum 374
Saccharides: HPLC for in-line purification 380
Sialoglycoproteins: Cell surface, selectively labeled by periodate-tritiated borohydride 283
Sialyltransferase
β-D-Galactoside-2-6, enzymatic properties 4
CDP-agarose affinity chromatographic purification from bovine colostrum 3
Sphingolipids: Tritium labeling of 330
Sterigmatocystin: Screening method for detection in cereals 139

ENTRY NO.

Sterol ester hydrolase: Isolation, purification, and properties from *Fusarium oxysporum* 86
Sterols
3α - P - bromobenzoyl - oxy - 14α,15α - epoxy - 5α - cholest-7-ene synthesis 80
Double bonds, titration with dibromosulfate 52
Free, liquid column chromatography of 407
Lability in acid of yeast extracted 351
Marine analysis by mass analyzed ion kinetic energy spectrometry 353
Marine, GLC micro-spectrometry on PZ-176 of 256
C-4 methylated, PMR 83
24,25-Oxidolano, isolation from yeast 81
Spirolactone, ion-exchange and lipophilic gel chromatography of 405
Steryl acetates: TLC of 102
Steryl β-glycoside: Synthesis 54
Sugars
Anion exchange partition of ethanol dissolved 328
Cerebrospinal fluid 221
Chromatography on DEAE-spheron 379
HPLC determination 217
Oligomeric separation from aldonic acid containing oligomers on anion exchange resins 22
Surfactants
Carrier electrophoresis, TLC of 93
Cationic and amphoteric, homolog distributions by GLC on the basis of the Hofmann degradation 143
Pulmonary, radio immunoassay 72
Thromboxanes
B_2, radioimmunoassay for 288
Oximes for HPLC and electron capture GLC 134
Separation from prostaglandins by one- and two-dimensional TLC 42
α-Tocopherol
HPLC determination of 269
Liquid chromatographic method for quantitative determination of 110
Tocopherols: Vegetable oil, TLC of 263
Triglycerides
Analytical comparison in 12 lipid research clinic laboratories 210
Assay by ABA-50 and Boehringer Mannheim reagent kits 212
Automated determination, comparison of three methods 215
Automated determination, loss of precision and accuracy 113

ENTRY NO.

Automated determination with continuous-flow systems containing immobilized enzymes 275
Enzymatic, applicable to long-term population studies 213
Enzymatic, automated determination of 65
Enzymatic determination in baboon and human serum 214
Enzymatic determination with system Olli 3000 analyzer 323
Enzymatic semi-automated assay 19
Fully enzymatic determination 66
Methanolysis on TLC 161
Trisaccharides: And hexosamine, hexosaminitol and hexosamine-containing disaccharides on an amino acid analyzer 21
Tristearin: ^{13}C spin relaxation for determination of molecular motion 112
Unsaturation, monoethylenic: Ozonolysis of with BF_3–methanol 8
Vitamin A
Automated analysis 148
Colorimetric modified method 196
HPLC resolution of related compounds 320
Spectrophotometric assay 193
Spectrophotometric determination in oils and fats 376
TLC of 194
Vitamin D
Determination in multivitamin preparations 373
24,25-Dihydroxy, competitive protein-binding radioassay of in serum 108
Vitamin D_2
Separated from plasma vitamins D_3 and 2-hydroxy D_2 and D_3 by HPLC 195
Synthesis of 5
Synthesis of 10,19-dehydro vitamins 321
Vitamin D_3
1,25-dihydroxy, bioassay, in vitro 6
HPLC of, compared to chemical methods 375
25-hydroxy, HPLC assay 270
Separated from D_2 and 25-hydroxy D_2 and D_3 by HPLC 195
Synthesis of 5
Vitamin E: GLC determination of in cosmetic products 7
Xanthophyll: Determination in vegetable oils 111
Zearalenone: Screening method for detection of in cereals 139